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INDUSTRIAL DEVELOPMENT IN GEORGIA, 1958-1965

by Amy Collins
INDUSTRIAL DEVELOPMENT DIVISION

Project E-400-410

1967

Engineering Experiment Station
GEORGIA INSTITUTE OF TECHNOLOGY
Atlanta, Georgia

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Foreword

This report is an updating and expansion of a previous publication, Industrial Development in Georgia since 1947, which covered employment trends in the state between 1947 and 1958. It has been capably prepared by Mrs. Amy Collins, Senior Research Economist on the Industrial Development Division staff.

The report contains a number of significant findings relating to the reversal of out-migration of people; the continuing development of textile, apparel and other low-wage industries; and the increasingly apparent need to place more emphasis on the development of machinery and metalworking industries.

There is some indication that "critical mass" in the industrialization of Georgia has been reached. The reversal of the traditional out-migration of people in the 1960-1965 period is significant. It appears that the state is generating more jobs than the labor force can fill and this has resulted in an influx of people from other locations.

While manufacturing employment in Georgia showed a robust growth in the 1958-1965 period, a basic problem remains. As long as the traditionally low-wage industries flourish without a dynamic increase in the more sophisticated higher-paying industries, it will be impossible for per capita income to increase at a rapid enough pace to reach the U. S. average.

The solution of this problem requires stepped-up, long-term efforts by the state to upgrade its educational system, to train or retrain its workers, and to attract the high-wage industries.

Every Georgian interested in the economic development of the state should take the time to read this definitive report. Comments and suggestions are solicited.

Ross W. Hammond, Chief
Industrial Development Division
GEORGIA INSTITUTE OF TECHNOLOGY

Summary

A few years ago Georgia passed an important milestone in its economic development. The net flow of migrants out of the state was gradually reversed by the increasing number of people attracted into the area. Between 1960 and 1965 net in-migration totalled 81,000 persons. For the first time in this century there were jobs available not only for Georgia's increasing population but also enough to pull in new residents from elsewhere.

The growth in employment added substantially to the total income of the state, and Georgia's per capita income increased as a percentage of the U. S. In actual dollars, however, the long-term trends still show Georgia lagging behind the national average. In 1965 Georgia's per capita income was $2,159 compared with $2,746 for the U. S., a difference of $587. If the trends since 1929 are continued to 1985 this difference will widen to $690.

Analysis of the details of Georgia's growth shows that one reason for this dollar gap is the continuing predominance of low-wage industries, such as textiles and apparel, in the state. Georgia ranked tenth in the nation and third in the Southeast in net manufacturing employment increase between 1958 and 1965, but a high proportion of this gain was in these low-wage industries. In 1965 nearly 60% of the manufacturing workers in Georgia were employed in textiles, apparel, food, and lumber and wood, compared with less than 26% in the nation as a whole. It is not surprising, then, that the average production wage for Georgia is roughly $25 per week less than the U. S. average.

However, since there are great variations in learning ability, there will always be a demand for unskilled or semiskilled jobs; these low-wage industries, therefore, form an essential part of the state's economy. Georgia's need is to balance these low-wage jobs with a better proportion of high-wage, high-skill jobs. This means a continuing emphasis on education at all levels. Adults as well as school children should be given the opportunity to achieve learning and skills commensurate with their abilities. The availability of qualified personnel will enable the state not only to attract top-ranking industries and research-oriented facilities but also to encourage the formation of new companies based on the material and human resources of the South.

INTRODUCTION

This report is one of a series based on the continued economic research and analysis of the Industrial Development Division. Much of the material updates and expands that of a previous publication, Industrial Development in Georgia since 1947, which covered employment trends in Georgia between 1947 and 1958.

The main emphasis of the report is on manufacturing development both in the state as a whole and in the individual counties, but pertinent data on population, income, and nonmanufacturing employment have been introduced as a background to the study.

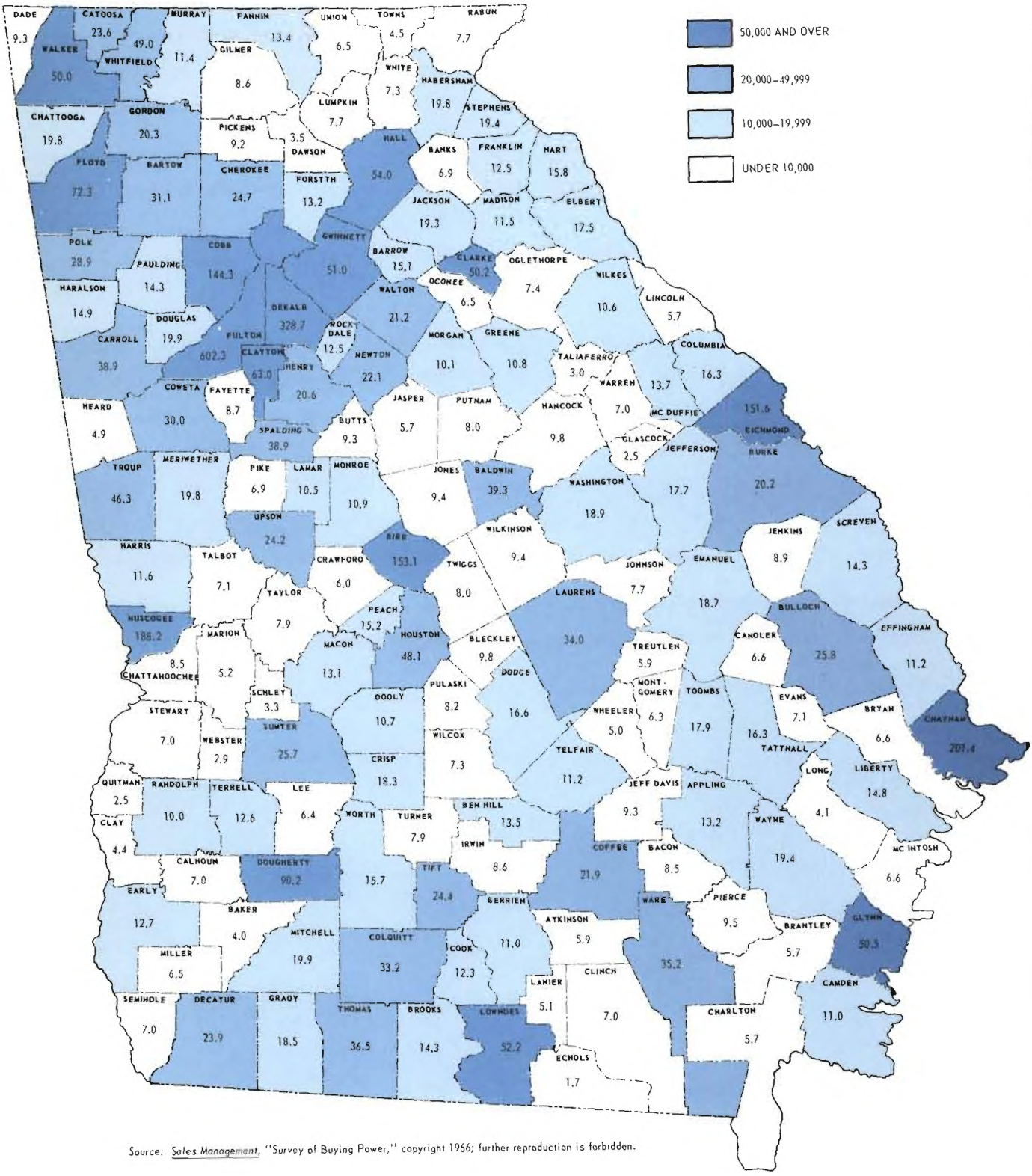
Most of the state and national employment figures have been taken from data published by the Bureau of Labor Statistics, U. S. Department of Labor. All manufacturing data by county are based on the figures for employment covered by the Georgia Employment Security Law, and special thanks are due to the Employment Security Agency, Georgia Department of Labor, for the use of unpublished records. (It should be noted that all data from the U. S. or Georgia Departments of Labor are by place of work rather than by place of residence.)

A map of the current population in Georgia counties is printed overleaf for those who wish to relate other data to the population size of individual counties.

MAP 1

POPULATION IN GEORGIA COUNTIES, 1965

(In Thousands)



Source: *Sales Management*, "Survey of Buying Power," copyright 1966; further reproduction is forbidden.

Section I

INCOME TRENDS -- GEORGIA AND THE U. S.

INCOME TRENDS -- GEORGIA AND THE U. S.

Many aspects of Georgia's economy are analyzed in the pages which follow, but particular emphasis is given to the progress in manufacturing in recent years. As background to the study it would be well to consider what results have been achieved -- what income has been produced by all the economic activities of the state -- compared with the results elsewhere in the nation.

One of the most meaningful comparisons is that of per capita income. Chart 1 shows the growth in Georgia's per capita income from 1929 to 1965 compared with that of the nation as a whole. Trend lines for this period are projected to 1985, and all figures are converted to 1965 constant dollars.

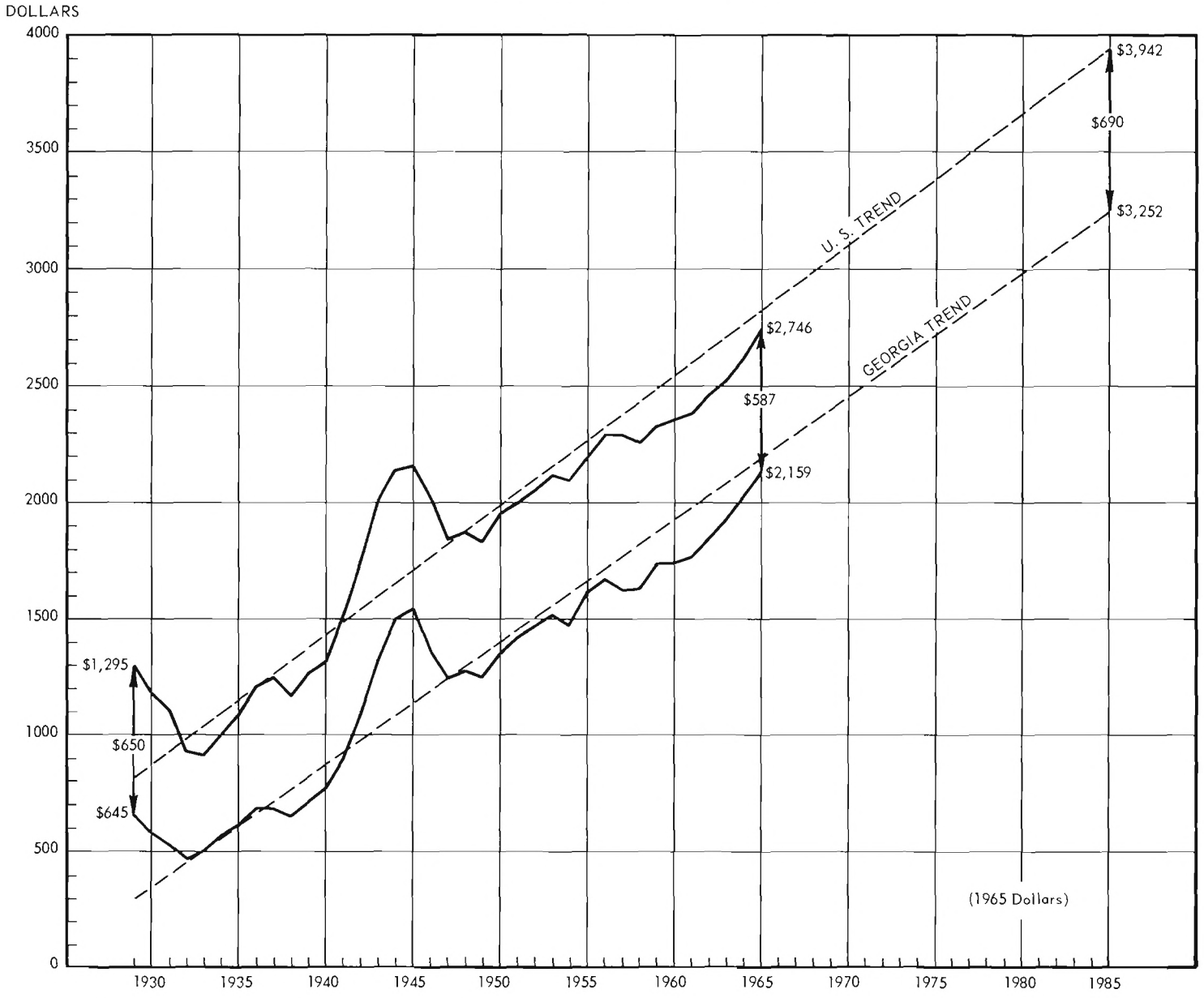
In 1929 Georgia's per capita income was less than half that of the U. S. By 1965 this proportion had increased to 78.6%, and the long-term trend indicates that by 1985 Georgia's per capita income will be 82.5% that of the U. S.

In dollar figures, however, the situation is not quite so bright. These percentages are proportions of a greatly increasing U. S. per capita income, and the actual dollar gap between Georgia and the nation has not changed so favorably. As the chart shows, the growth in Georgia's per capita income has closely paralleled that of the U. S. The dollar variation between the two (in 1965 dollars) dropped from $650 in 1929 to a low of $417 in 1933, but then climbed rapidly to the $500-$600 range. Since 1950 this dollar gap has fluctuated between a high of $646 (1957) and a low of $584 (1952 and 1964), but the long-term trend shows a gradual widening of the gap to $690 in 1985.

The situation in Georgia, then, is one of increased prosperity, but it also is one of a continued lag behind the average for the nation. To catch up to the U. S. per capita income by 1985, the state would need to increase its 1965 per capita by $1,783 (1965 dollars), while at the same time the overall gain for the nation would be $1,196. This would be a steep climb indeed, and many problems would have to be solved before such a growth rate would be feasible. As this study reveals, one of the major problems is that of attracting more high-wage industries to Georgia. This problem, in turn, ties in with the need for continued improvement in the state's educational facilities in order to be able to offer the high skills and technical knowledge required by such industries.

CHART 1

TRENDS IN PER CAPITA INCOME, GEORGIA AND THE U. S.,
1929–1965 WITH PROJECTIONS TO 1985



Source: U. S. Department of Commerce, Office of Business Economics.

Throughout the state the situation varies, and some idea of the relative prosperity of different regions can be obtained from Map 2 and the accompanying table. On this map, Georgia's counties are grouped according to the organizational set-up of the 17 area planning and development commissions in the state (only 11 counties, representing 5% of the total population of the state, now remain outside these planning areas); it shows the total effective buying income (income available after payment of taxes) for each area. The additional income that each group of counties would have had if the local per capita income had been equal to the average for the U. S. in 1965 also is shown. Only one area -- the six counties forming the Atlanta Region Metropolitan Planning Commission -- already has an income higher than the U. S. average. Nine of the areas would increase their income by at least 50% if they could equalize their per capita with that of the U. S.

Manufacturing obviously is not the only industry group in which high wages can be earned, but the production of goods is a basic spur to other elements of the economy. Only a limited number of communities can hope for specialized employment generators such as research facilities, tourist attractions, or military bases, but all of them can seek to acquire a new manufacturing plant.

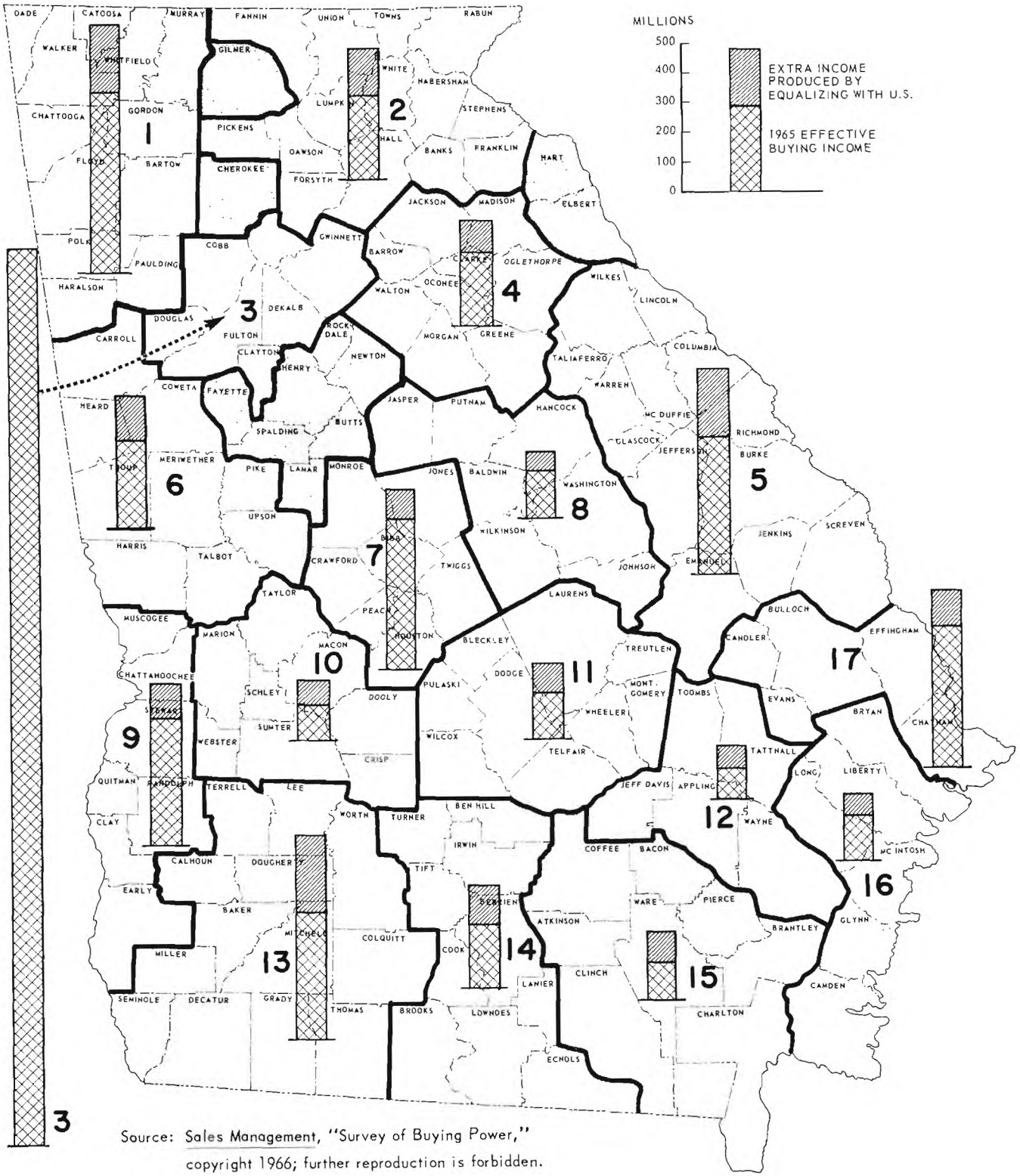
Georgia already has a substantial proportion of low-wage manufacturers, and these are a highly essential part of the state's economy. Many of the workers they employ do not have the skills necessary to hold down jobs of any greater complexity; they would swell the ranks of the unemployed but for the unskilled and semiskilled work available in the lumbering and wood operations and the apparel and textile plants.

To boost income levels throughout the state, however, more high-wage industries must be attracted. Several interrelated factors should be considered in this respect. The highly qualified personnel required for such operations, whether they are locally educated or brought in from outside the area, require good-quality educational establishments for themselves and their families, pleasant residential areas, and easy access to cultural and recreational facilities. If the educational requirements can be met, it usually follows that the area already has (or will have) suitable labor to supply a high-skill industry and that the whole economic framework is favorable to high-quality industrial growth.

Georgia has reached the stage of being able to provide enough jobs for its expanding population. Its aim now should be to obtain an increased proportion of industries requiring a high degree of skills, so that in the flow of migrants in and out of the state the tendency will be to attract rather than to lose top-quality workers, and so that local incentive will be provided to encourage individuals to obtain the best education their abilities can command.

MAP 2

ADDITIONAL INCOME BY EQUALIZING WITH U. S. PER CAPITA INCOME, PLANNING AND DEVELOPMENT COMMISSION AREAS, 1965



Source: Sales Management, "Survey of Buying Power," copyright 1966; further reproduction is forbidden.

ADDITIONAL INCOME BY EQUALIZING WITH U. S. PER CAPITA INCOME, 1965[a/]

	Planning and Development Commission Areas	Total Effective Buying Income	Additional Income by Equalizing with U. S. per Capita
1.	Coosa Valley	$ 596,900,000	$ 219,400,000
2.	Georgia Mountains	285,900,000	153,300,000
3.	Atlanta Region Metro	3,010,500,000	
4.	Northeast Georgia	251,800,000	108,100,000
5.	Central Savannah River	466,100,000	220,800,000
6.	Chattahoochee-Flint	295,900,000	153,100,000
7.	Middle Georgia	500,800,000	92,500,000
8.	Oconee	153,400,000	80,400,000
9.	Lower Chattahoochee	437,500,000	114,800,000
10.	West Central Georgia	115,000,000	91,100,000
11.	Heart of Georgia	141,700,000	105,200,000
12.	Altamaha	104,700,000	75,400,000
13.	Southwest Georgia	424,200,000	242,000,000
14.	Coastal Plain	224,900,000	132,600,000
15.	Slash Pine	145,600,000	89,800,000
16.	Coastal	155,900,000	65,700,000
17.	Georgia Southern	470,400,000	126,300,000
			$2,070,500,000
	Non-member Counties	294,300,000	153,400,000
			$2,223,900,000

a/ The additional income that each group of counties would have if the local per capita income had been equal to the average for the U. S.

Section II

A COMPARATIVE LOOK AT GEORGIA'S ECONOMIC GROWTH

POPULATION AND EMPLOYMENT TRENDS IN GEORGIA

Records going back to before the turn of the century show a continual flow of migrants out of Georgia -- but in the past few years this situation has been reversed. Out-migration slowed in the second half of the 1950-1960 decade, and somewhere around 1959 or 1960 a gradual net in-migration began. Recent estimates by the Bureau of the Census show Georgia gaining 81,000 people by in-migration between April 1, 1960, and July 1, 1965.

Table 1 compares the net civilian migration figures for Georgia with those of the other southeastern states from 1940 to 1965. Florida, of course, has been attracting new residents at a tremendous rate throughout this period.

Table 1

NET CIVILIAN MIGRATION,[a/] 1940-1965
(in thousands of persons)

	1940-50	1950-55	1955-60	1960-65
GEORGIA	-290	-178	- 40	+ 81
Alabama	-313	-299	- 62	- 30
Florida	+568	+714	+905	+523
Mississippi	-425	-347	- 85	- 59
North Carolina	-261	-259	- 70	- 5
South Carolina	-230	-186	- 53	- 49
Tennessee	-117	-155	-110	+ 37

a/ Migration figures are based on the difference between (a) the population at the beginning of the period, plus (b) the natural increase (births less deaths), and (c) the population at the end of the period; i.e.,

$$c - (a + b) = \overset{+}{-} \text{ migration}$$

Note: 1940, 1950, 1960 as of April 1 in each year.
1955, 1965 as of July 1 in each year.

Sources: U. S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-25, Nos. 227, 304, and 348.

Tennessee was the only other state to join Georgia in reversing the former negative trend in the five years between 1960 and 1965, but figures for the other four states indicate that this shift soon will apply to them as well.

The implications of this in-migration are that for the first time in this century Georgia is providing enough jobs for its expanding population, with some to spare for additional residents attracted from elsewhere.

Although the population of Georgia increased by 26.2% between 1940 and 1960, this gain was far less than the natural increase, and, as Table 1 indicates, there was a net out-migration of over 500,000 persons during the 20-year period. As a result, Georgia's proportion of the total population of the U. S. dropped from 2.37% in 1940 to 2.20% in 1960. The gain from in-migration between 1960 and 1965, plus the natural increase, brought the state's population to 4,391,000[1/] as of July 1, 1965, and Georgia's proportion of U. S. population climbed back to 2.27%.

These percentages are shown in Table 2 and compared with Georgia's share of the total U. S. employment in major industrial categories. In 1940 the

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Table 2

POPULATION AND EMPLOYMENT
GEORGIA'S AS PERCENT OF U. S.

	1940	1950	1960	1965
Population	2.37	2.29	2.20	2.27
Employment				
Agricultural	4.46[a/]	3.22	2.59	2.48
Total nonagricultural	1.71	1.78	1.94	2.07
Manufacturing	1.77	1.88	2.03	2.23
Construction	2.53	1.73	1.92	2.27
Transportation and public utilities	1.62	1.68	1.83	2.06
Trade	1.67	1.83	1.97	2.08
Finance, insurance, real estate	1.18	1.46	1.84	1.99
Service and miscellaneous	1.90	1.61	1.57	1.63
Government	1.74	1.94	2.23	2.20

a/ Derived from the U. S. Census of Population and not strictly comparable with the other employment data.

Sources: Population: 1940-60 -- U. S. Censuses of Population (Alaska and Hawaii excluded from 1940 and 1950 calculations -- inclusion would decrease Georgia's proportion of population by .01% in each of the two years.) 1965 -- U. S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-25, No. 354.

Agriculture: U. S. Department of Agriculture, Statistical Reporting Service, Crop Reporting Board. State figures not available in this series prior to 1950.

All Other: Employment and Earnings Statistics, Bureau of Labor Statistics.

1/ U. S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-25, No. 348.

state had a far greater share of the nation's agricultural jobs than it had of population -- and a lesser share of every other industry group but construction. This statement is still true in 1965, but the percentages are leveling off closer to the population figure. The proportion of agricultural workers is still above average, but Georgia's share of manufacturing jobs is nearly level with its share of population.

The percentages in the table, of course, take into account the national changes in employment distribution, and the extent of the decline in Georgia's farm workers is somewhat masked by a similar decline in the U. S. figure. Chart 2 gives a better idea of the local impact of this nationwide trend. There are many variations in the definition of "farm worker," but regardless of which figures are accepted, the overall decrease is of major importance. The yearly series used is not broken down by state prior to 1950, but data from the Decennial Census of Population also are given to indicate the situation in 1940. However, the Census records each worker only once -- under the job on which he worked the greatest number of hours during the reference week -- and the total for agricultural employees is, therefore, much smaller than is shown by other summaries of persons working on farms, many of whom hold major jobs elsewhere.

Since the use of machines has led to much greater productivity per acre, the trend to more mechanization and larger farms is likely to continue. There is, of course, a limit to how far the reduction in farm workers can go, but the decline in Georgia is likely to continue for some years.

All other major segments of Georgia industry show an upward trend. The boost to manufacturing employment during World War II is very clear on the chart, and there is every indication that the figure for 1966 will continue the upward surge shown between 1961 and 1965 at an even faster rate.

In an earlier report published by this Division,[1/] a similar chart recorded employment trends to 1958. If the growth in the number of manufacturing employees in Georgia since that date is compared with that of the other states, Georgia ranks tenth in the nation with 4.0% of the total increase for the U. S. This growth increased Georgia's share of the nation's manufacturing employees from 2.0% in 1958 to 2.2% in 1965.

1/ Industrial Development in Georgia since 1947.

CHART 2

EMPLOYMENT TRENDS IN GEORGIA BY SELECTED MAJOR INDUSTRIES, 1940–1965

Sources: U. S. Department of Labor, Bureau of Labor Statistics
U. S. Department of Agriculture
Agricultural data designated by (●) from U. S. Census of Population (see text).

Table 3 lists the top 12 states in order of their percentage of this seven-year growth, and it can be seen that new manufacturing employment did not necessarily go to states that had the strongest manufacturing base. New York is not on the list. It still leads all other states in the total number of manufacturing employees, but between 1958 and 1965 it lost 29,900 workers and its proportion of the U. S. total dropped from 11.7% to 10.2%. Massachusetts had a net increase of only 1,100, and its share of the U. S. total manufacturing employees dropped from 4.2% in 1958 to 3.7% in 1965. New Jersey had an increase of 56,800 in the seven years, but this was not enough for it to maintain its 4.9% of the U. S. total -- by 1965 it had dropped back to 4.6%.

Table 3

THE TOP TWELVE STATES IN MANUFACTURING EMPLOYMENT INCREASE, 1958-1965

	Manufacturing Employment				Population
	Increase 1958-65 (000)	Percent of U. S. Increase	Percent of U. S. in 1958	Percent of U. S. in 1965	Percent of U. S. in 1965
Michigan	206.9	10.2	5.6	6.1	4.3
California	190.9	9.4	7.6	7.8	9.5
Illinois	128.9	6.3	7.3	7.2	5.5
Indiana	122.4	6.0	3.4	3.7	2.5
Ohio	120.6	5.9	7.5	7.3	5.3
North Carolina	117.4	5.8	2.9	3.3	2.5
Tennessee	97.6	4.8	1.8	2.1	2.0
Texas	90.6	4.4	3.0	3.2	5.5
Pennsylvania	88.6	4.3	8.8	8.3	6.0
GEORGIA	80.7	4.0	2.0	2.2	2.3
Florida	70.9	3.5	1.1	1.4	3.0
South Carolina	65.7	3.2	1.4	1.6	1.3

Sources: U. S. Department of Labor, Bureau of Labor Statistics.
U. S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-25, No. 348.

One point of great interest emerges. In this list of the top 12 in manufacturing employment increase, five of the states are in the Southeast. Only Alabama is missing from the six-state Southeast, and it retained its percentage of 1.5% of U. S. manufacturing employees with a seven-year increase of 42,500 workers.

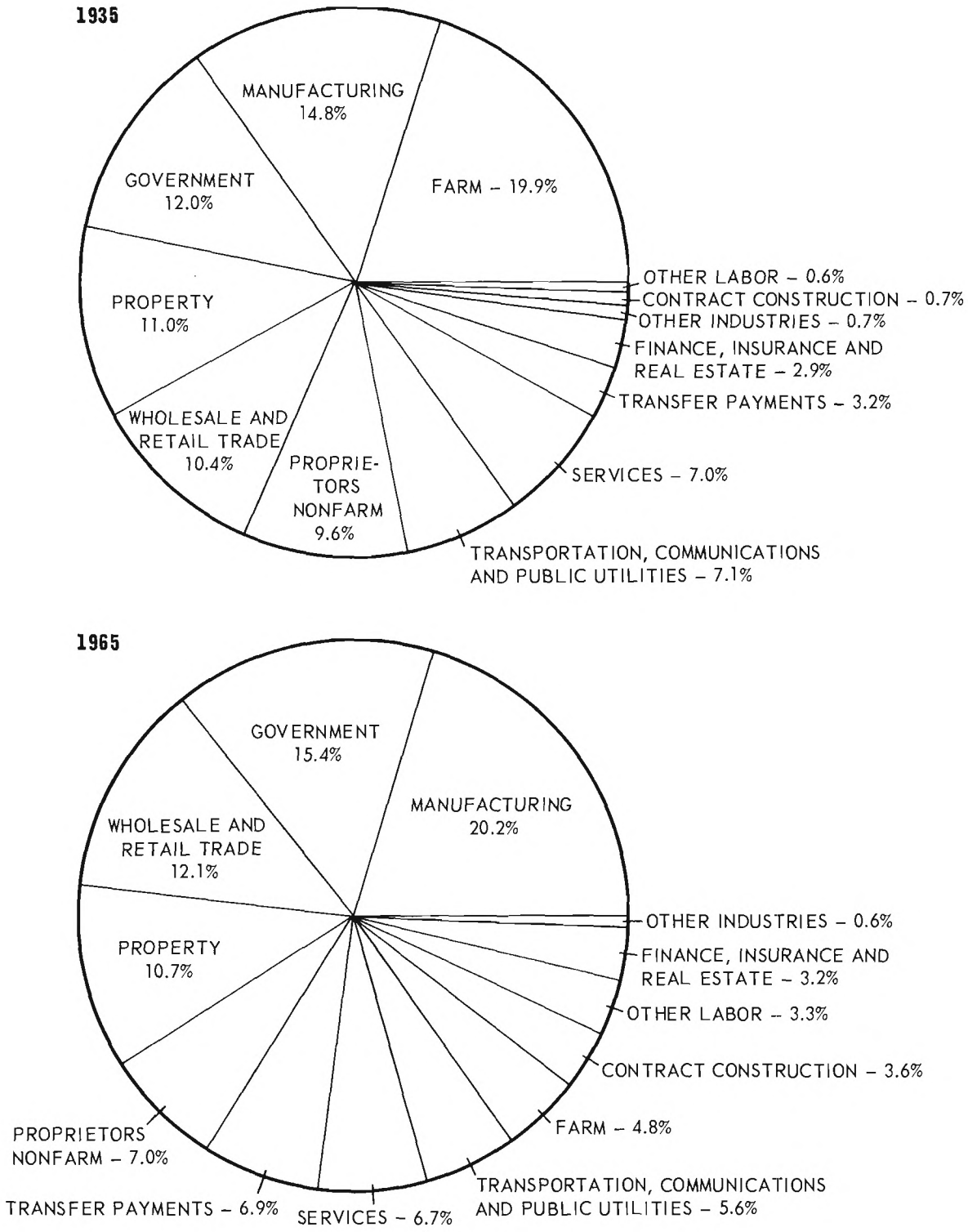
PERSONAL INCOME

The change in the basic economy of Georgia is further illustrated in Chart 3. In 1935 almost 20% of the state's income came from farming; manufacturing was in second place with 14.8%. In 1965 -- just 30 years later -- manufacturing was the source of over 20% of the state's income, and farming had dropped far back to 4.8%.

By comparison, in the U. S. (Chart 4) manufacturing was already the dominant industry in 1935, supplying 18% of the nation's income, while farming accounted for 9.6%. In 1965 manufacturing had increased in importance to 21.2% (one percentage point higher than in Georgia), while farming had decreased to 3.3%.

CHART 3

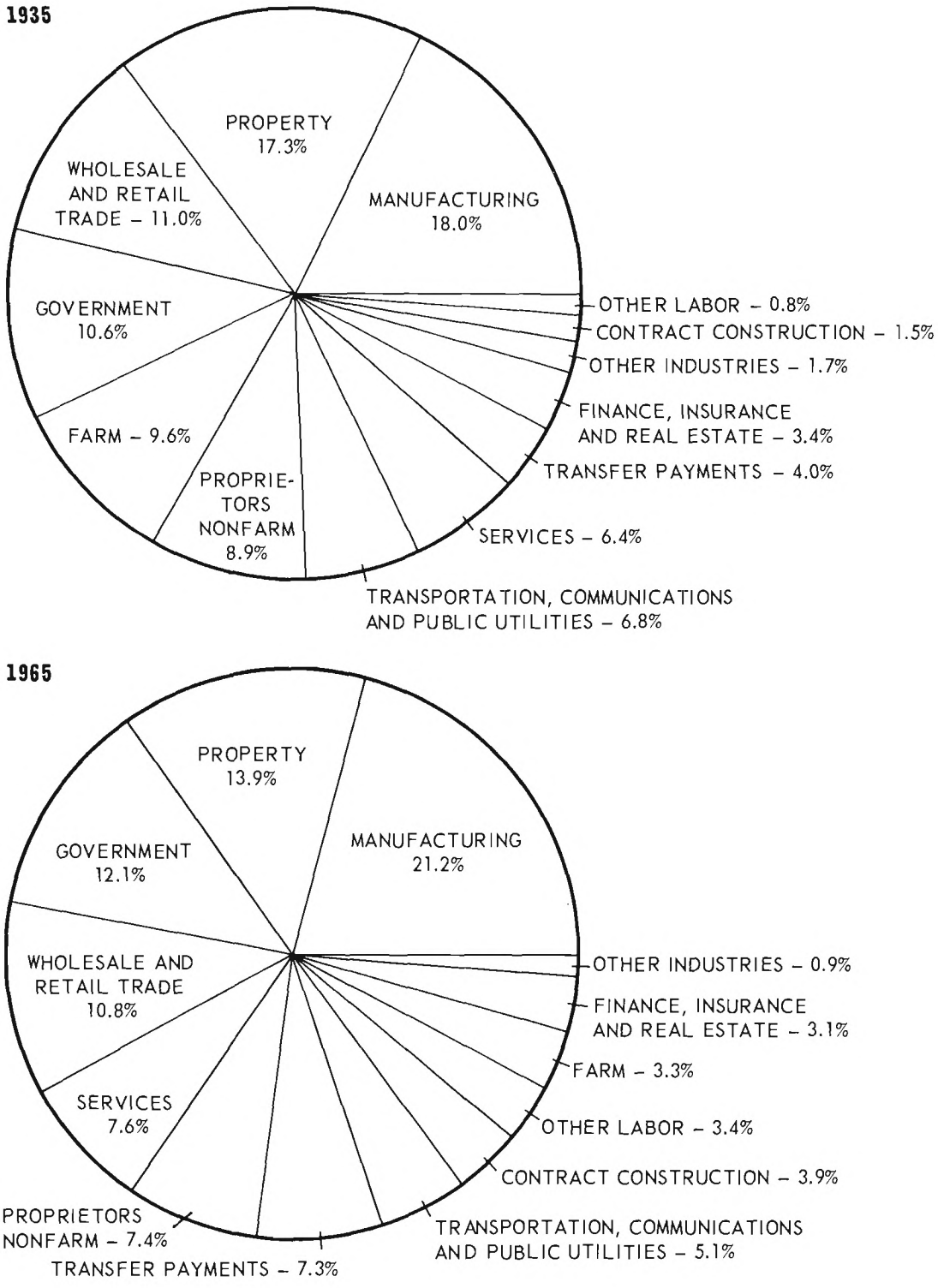
PERSONAL INCOME IN GEORGIA BY MAJOR SOURCES, 1935–1965



Source: U. S. Department of Commerce, Office of Business Economics.

CHART 4

PERSONAL INCOME IN THE U. S. BY MAJOR SOURCES, 1935–1965



Source: U. S. Department of Commerce, Office of Business Economics.

NET MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES, 1958-1965

Georgia ranked third in the southeastern states in net manufacturing employment gains from 1958 to 1965 -- the same position it held in the 1947-1958 period. Florida lost its number one position to North Carolina, however, and dropped to fourth place. Tennessee, which held the fourth place in the earlier period, ranked second in its 1958-1965 gain.

Manufacturing employment gains in these four states between 1958 and 1965 were as follows:

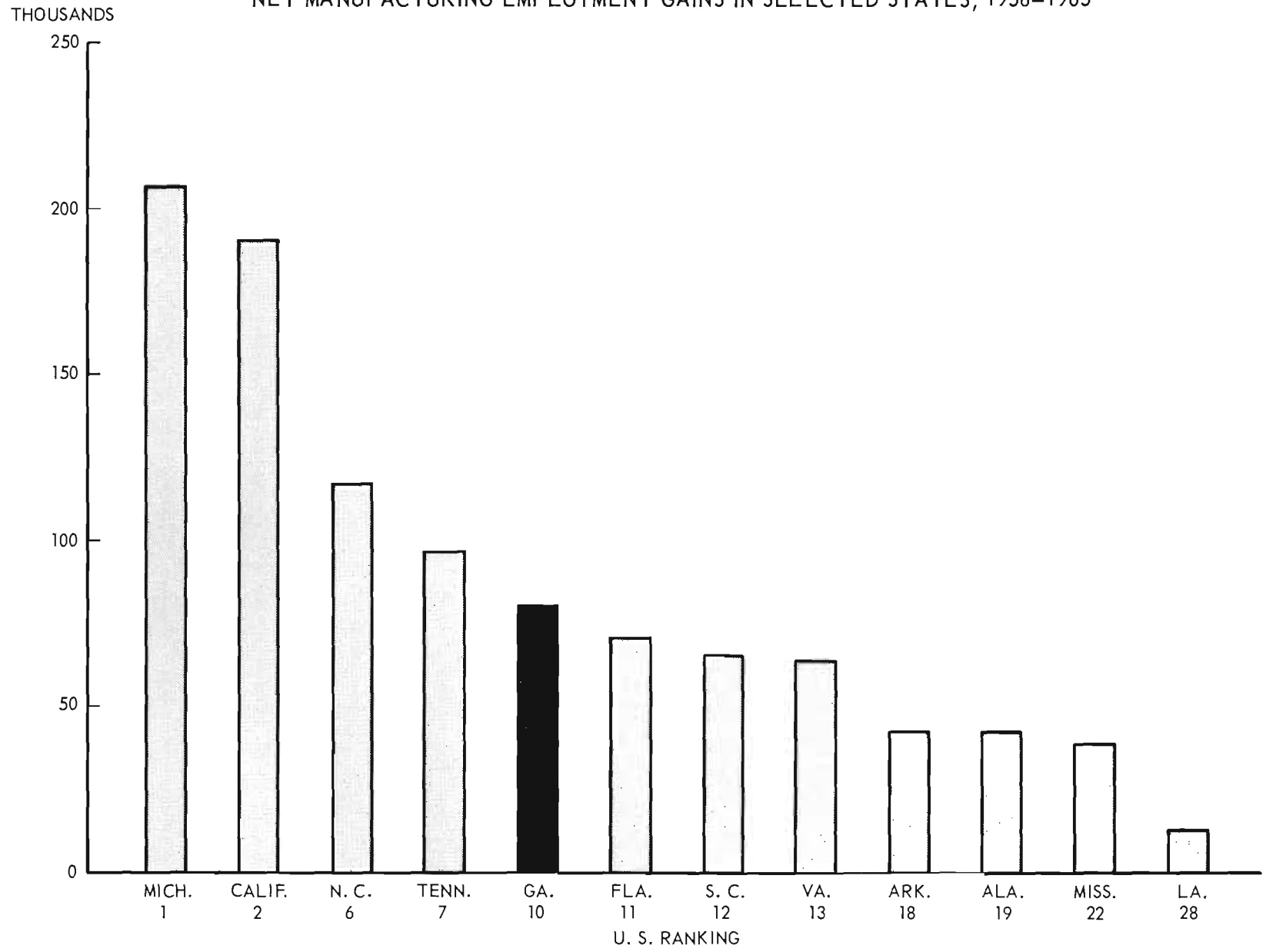
North Carolina	117,400
Tennessee	97,600
GEORGIA	80,700
Florida	70,900

Chart 5 illustrates the employment growth of 10 southeastern states and also shows the gain for Michigan and California, the two leading states in this category. Although these two states are a long way ahead in manufacturing employment growth, only three other states separate sixth-ranking North Carolina and second-ranking California.

There are, however, wide variations in the types of manufacturing building up this growth, and some analysis by industry in the different states is necessary to obtain the comparative value of the job increases.

CHART 5

NET MANUFACTURING EMPLOYMENT GAINS IN SELECTED STATES, 1958–1965



Source: U. S. Department of Labor, Bureau of Labor Statistics.

COMPARISON OF MANUFACTURING GAINS BY INDUSTRY

The six pie-charts on the opposite page compare the major types of manufacturing employment growth in Georgia with those of the U. S., the leading state of Michigan, the two southeastern states that were ahead of Georgia in number of new jobs (North Carolina and Tennessee) and the state immediately below Georgia in rank (Florida).

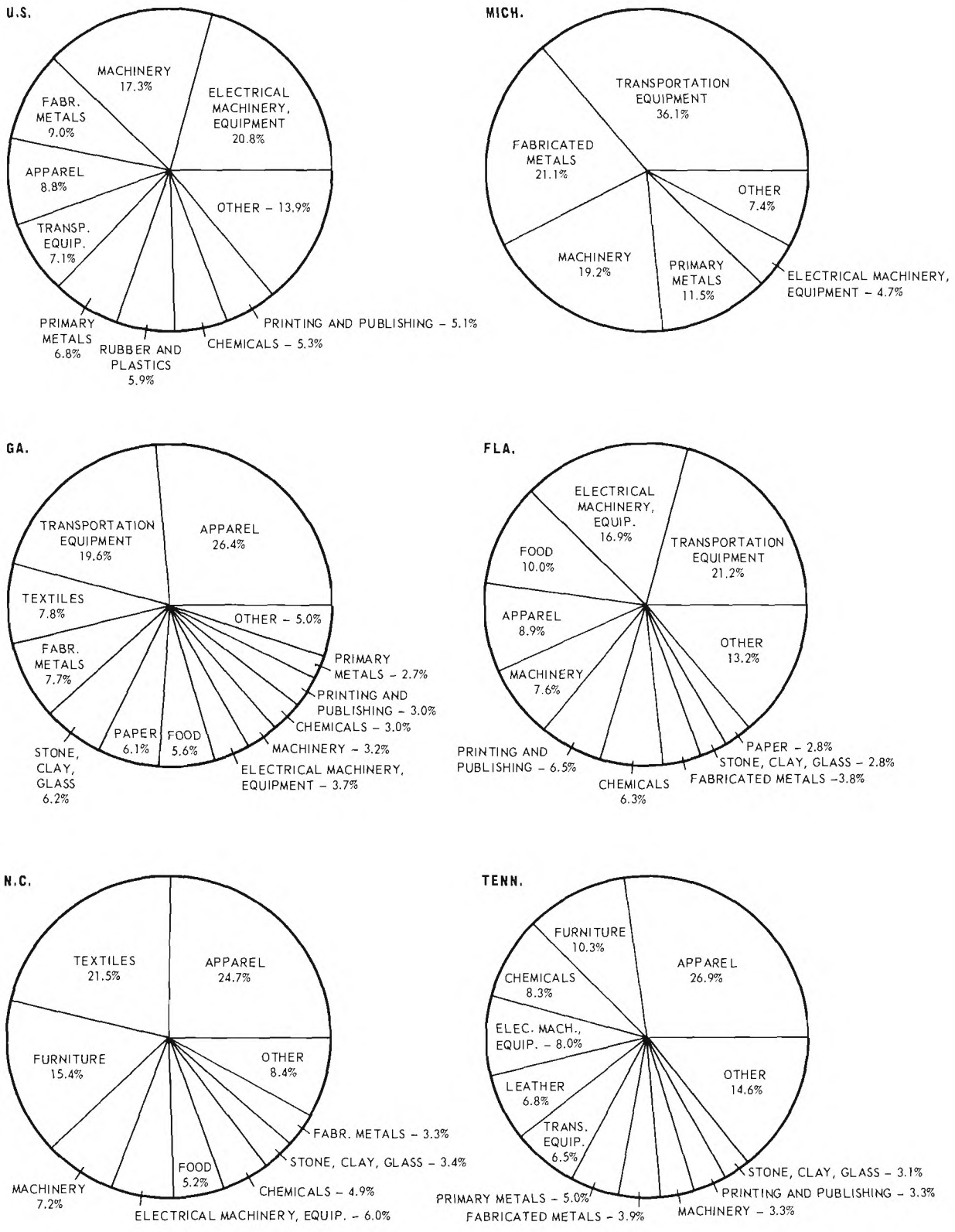
One factor ties together Georgia and its two neighbors to the north -- employment in the apparel industry accounts for one-quarter of the gain in each of these states. Apparel is one of the lowest of the low-wage industries, and the benefit of such jobs to the income of the state is considerably below that derived from new jobs in the machinery, metalworking, and transportation equipment industries. Other types of low-wage manufacturing that figure importantly in the employment gains in the southeastern states are textiles, furniture, and leather.

If the employment increases in these four low-wage industries are combined, the total for the U. S. is roughly 12% of the 1958-1965 gain. For Michigan and Florida the figures are 5% and 10%, respectively. But for North Carolina, Tennessee, and Georgia (in that order) these industries account for 62%, 45%, and 37% of the total net gain in manufacturing employment.

Further details of the distribution of manufacturing gains for seven southeastern states and the U. S. are given in the final column of the Appendix Tables.

CHART 6

DISTRIBUTION OF MANUFACTURING EMPLOYMENT GAINS, 1958–1965



Source: U. S. Department of Labor, Bureau of Labor Statistics.

GEORGIA'S GAINS COMPARED WITH THE U. S., 1958-1965

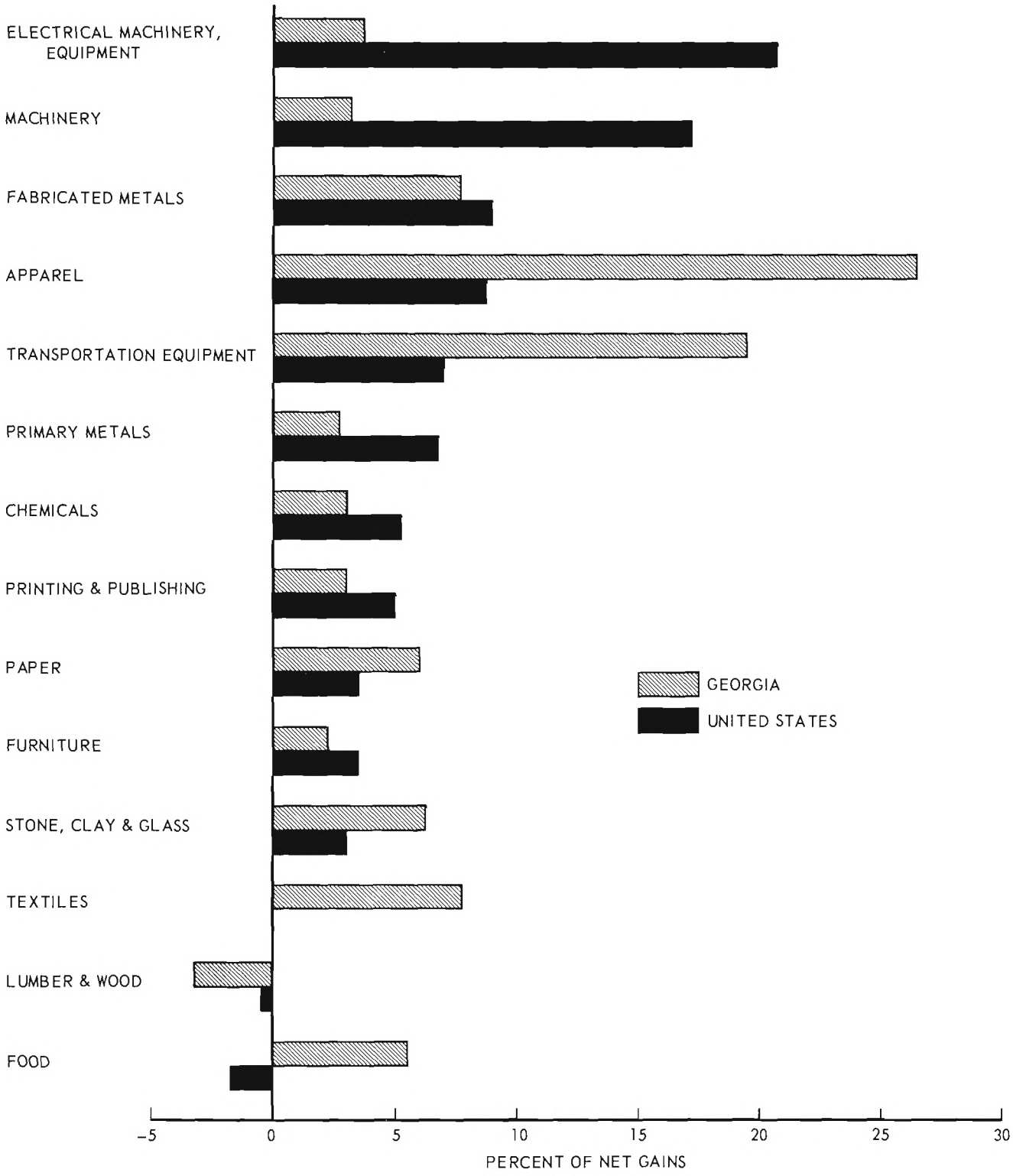
Chart 7 presents the comparative proportions of manufacturing employment gains for Georgia and the U. S. in closer juxtaposition. Georgia's weakness in all types of machinery manufacturing gains is clear. Less than 7% of Georgia's total growth came in these two categories, compared with over 38% for the overall U. S. average.

Georgia far outstripped the U. S. in the proportion of employment increase accounted for by apparel and transportation equipment. In textiles and food, which represented 7.8% and 5.6%, respectively, of Georgia's total manufacturing gain, the proportion for the U. S. in the first case was negligible and in the second case showed a net loss. In the lumber and wood industries, Georgia showed a greater proportionate net loss than the U. S.

Data for this chart are given in the final columns of Appendix Tables 1 and 8.

CHART 7

DISTRIBUTION OF MANUFACTURING EMPLOYMENT GAINS IN SELECTED INDUSTRIES, GEORGIA AND THE U. S., 1958–1965



Source: U. S. Department of Labor, Bureau of Labor Statistics.

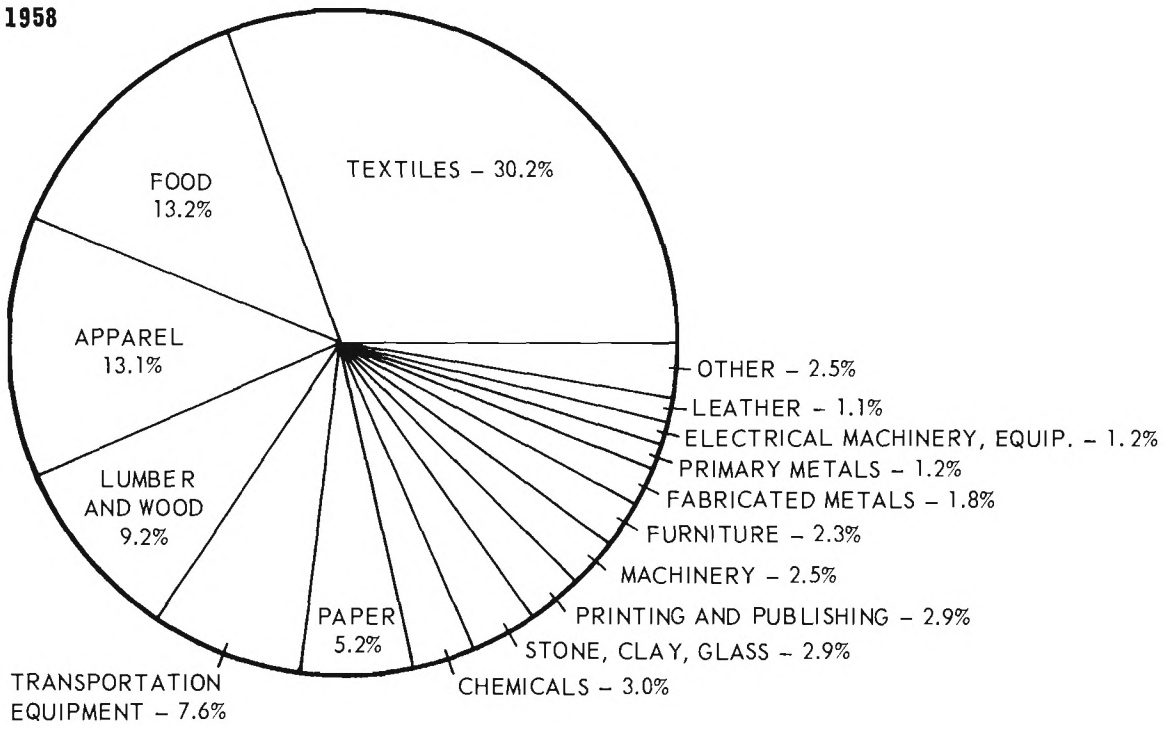
DISTRIBUTION OF MANUFACTURING EMPLOYMENT IN GEORGIA BY INDUSTRY, 1958 AND 1965

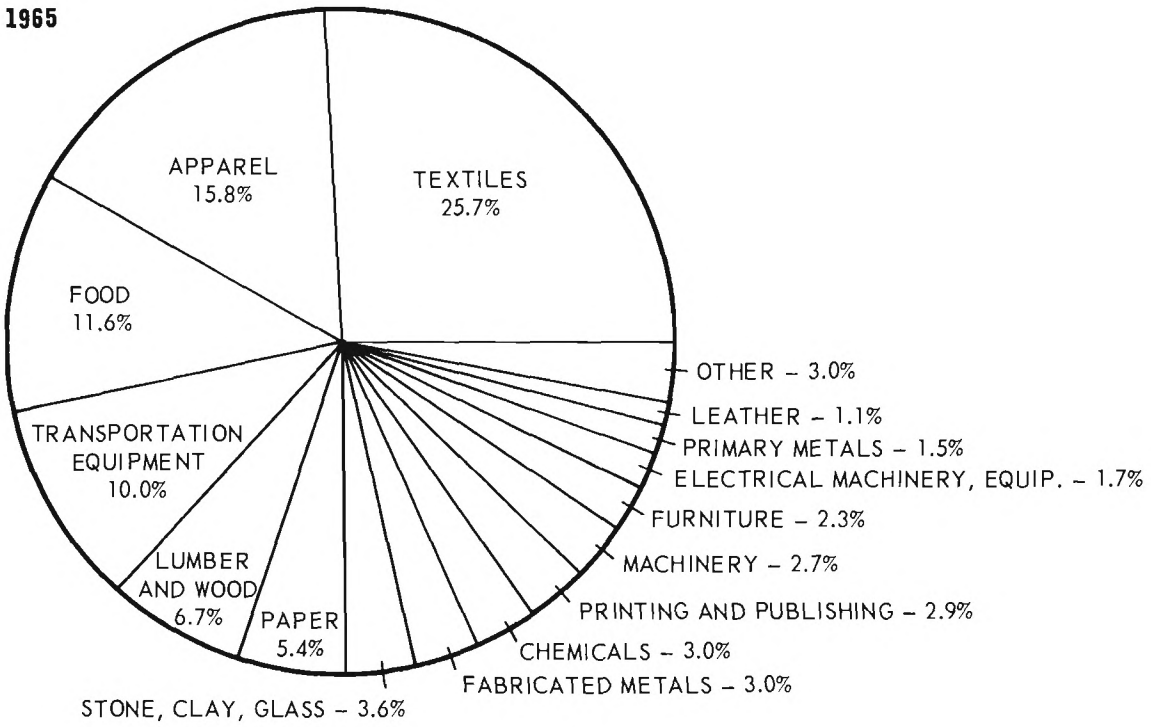
The distribution of manufacturing employment by major industries in Georgia for 1958 and 1965 is illustrated on Chart 8. The increase of 21,300 workers in apparel manufacturing brought this industry to second place in 1965. Textiles still ranked first, but its relative importance had decreased from 30.2% to 25.7% of total manufacturing.

Only one industry showed an actual loss in number of employees -- jobs in lumber and wood dropped from 29,300 in 1958 to 26,700 in 1965, and its share of total manufacturing was reduced from 9.2% to 6.7%. Transportation equipment climbed from fifth to fourth place with an increase of 15,800 employees, representing 10.0% of manufacturing in 1965. Food, with a comparatively small increase of 4,500 workers, reduced its proportion from 13.2% to 11.6% and dropped to third place.

CHART 8

DISTRIBUTION OF MANUFACTURING EMPLOYMENT IN GEORGIA
BY INDUSTRY, 1958–1965





Source: U. S. Department of Labor, Bureau of Labor Statistics.

DISTRIBUTION OF MANUFACTURING EMPLOYMENT IN SELECTED INDUSTRIES, GEORGIA AND THE U. S., 1965

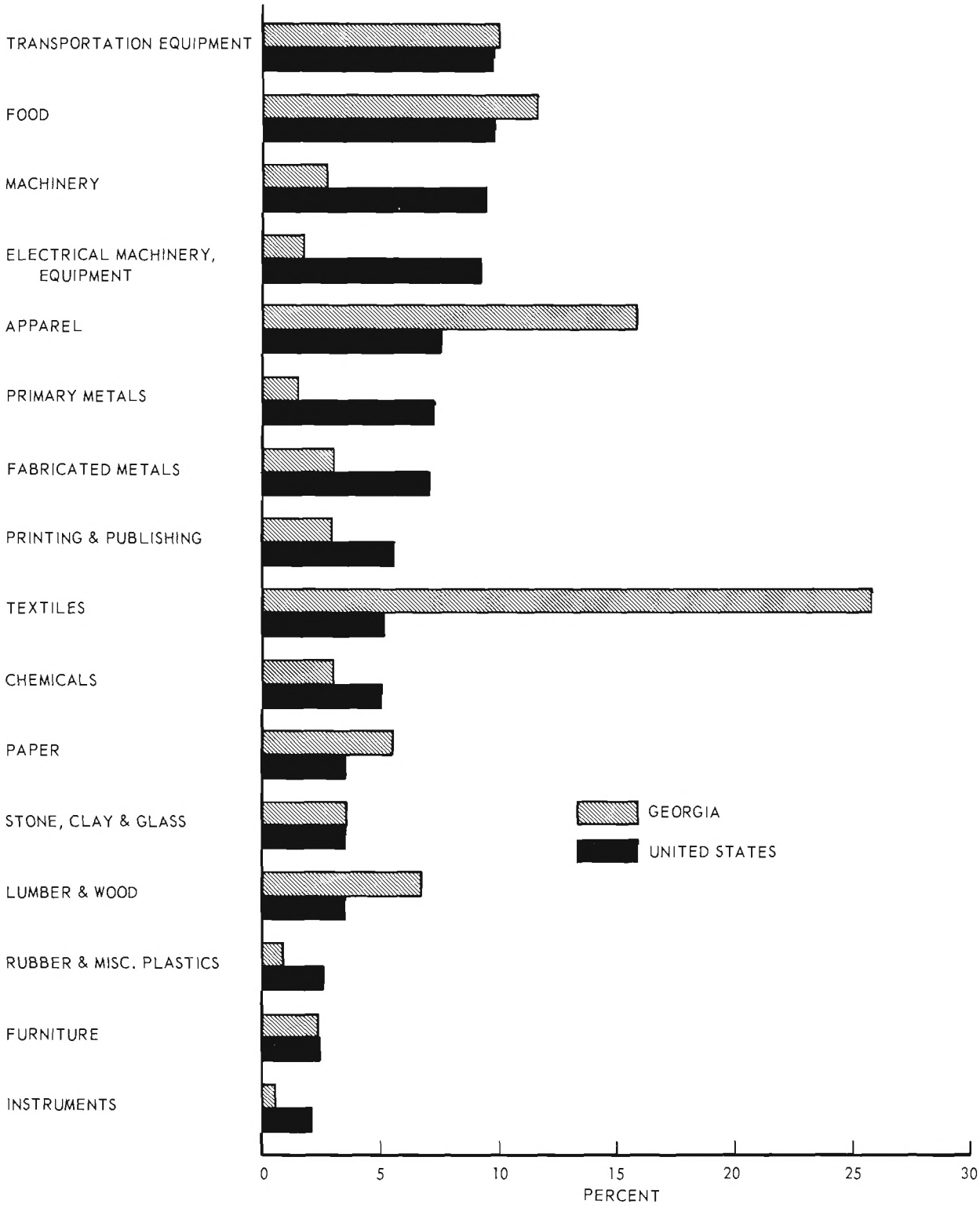
Chart 9 shows the wide variation in the relative importance of industries in Georgia as compared with the overall pattern in the U. S. Textiles and apparel account for 12.6% of manufacturing employment in the nation as a whole, but in Georgia 41.5% of all manufacturing workers are in these two industries. Machinery and metalworking operations, however, are very poorly represented in Georgia. The four categories in this group -- electrical and nonelectrical machinery, primary and fabricated metals -- give employment to only 8.9% of Georgia's manufacturing workers, compared with 33.0% for the U. S.

Similar imbalances exist in other southeastern states. Both North and South Carolina are heavily engaged in textiles, and the apparel industry in both states is increasing in importance. In 1965, these two categories accounted for 51.1% of total manufacturing employment in North Carolina and 61.8% in South Carolina. In Alabama, Mississippi, and Tennessee, these two industries represented roughly one-quarter of total manufacturing employment. Florida's industry is more evenly distributed, with the greatest emphasis being on food production.

Other low-wage industries, such as lumber and wood, furniture, and leather, also are important categories in some of the southeastern states. Details of the manufacturing employment distribution for 1958 and 1965 for the seven southeastern states and for the U. S. can be found in the Appendix.

CHART 9

DISTRIBUTION OF MANUFACTURING EMPLOYMENT IN SELECTED INDUSTRIES, GEORGIA AND THE U. S., 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics.

AVERAGE WEEKLY EARNINGS OF PRODUCTION WORKERS

The preponderance of low-wage industries in the Southeast is reflected in the average weekly earnings in manufacturing. Although Georgia's average wage increased as a percentage of the U. S. figure from 73.1% in 1958 to 76.8% in 1965, the state remained number 44 in overall ranking. (See Table 4.)

Table 4

GROSS AVERAGE WEEKLY EARNINGS OF PRODUCTION WORKERS
ON MANUFACTURING PAYROLLS FOR THE U. S. AND SELECTED STATES, 1958 AND 1965

			Rank in 48 States[a/]	
	1958	1965	1958	1965
U. S. Average	$ 82.71	$107.53	-	-
Top Five in 1965				
Michigan	99.13	143.79	2	1
Ohio	93.42	127.02	6	2
Nevada	104.26	126.88	1	3
California	97.36	123.83	3	4
Washington	94.28	122.06	4	5
Southeastern States				
Alabama	70.07	93.63	36	36
Florida	68.68	91.37	39	38
Tennessee	67.03	85.27	40	41
GEORGIA	60.45	82.61	44	44
South Carolina	56.55	78.77	47	45
North Carolina	56.41	75.15	48	46
Mississippi	60.25	74.98	45	48

a/ Excluding Alaska, Hawaii, and Washington, D. C.

Source: U. S. Department of Labor, Bureau of Labor Statistics.

MANUFACTURING EMPLOYMENT AND WAGES, GEORGIA AND THE U. S., 1965

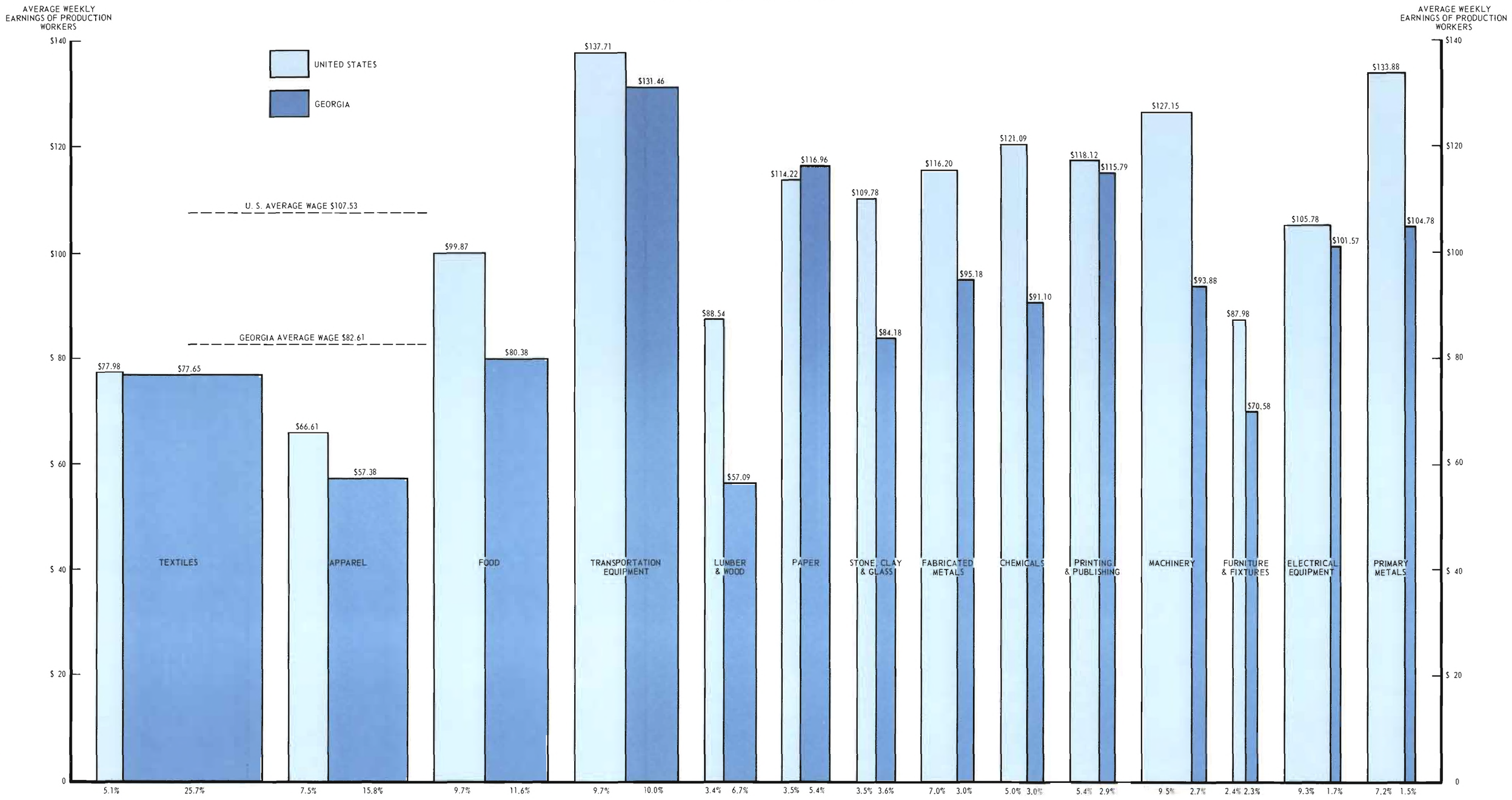
Chart 10 gives an overall picture of Georgia's employment and wage structure in manufacturing as compared with that of the U. S. The proportion that each industry represents of total manufacturing employment is related to the average production wage for that industry -- in descending order of employment magnitude for Georgia.

The high proportion of employees in Georgia working in industries with the lowest wages is very clear. In addition, the average Georgia wage in every industry except paper is below (in many cases considerably below) that of the U. S. for the same industry. The combination of these two factors results in an average production wage for Georgia that is roughly $25 per week less than the average for the U. S.

It is not surprising then, since manufacturing plays such an important part in the overall economy and wealth of the state, to find that Georgia's per capita income is considerably below that of the U. S. average (Chart 1).

CHART 10

MANUFACTURING EMPLOYMENT AND WAGES FOR SELECTED INDUSTRIES, GEORGIA AND THE U. S., 1965



Source: U. S. Department of Labor, Bureau of Labor Statistics.

Section III

DEVELOPMENT IN GEORGIA COUNTIES

GEORGIA INCOME BY COUNTY

The previous section dealt with manufacturing in the state as a whole, comparing Georgia's development with that of other states and the nation. Within the boundaries of the state there is, of course, considerable economic variation, and this section will deal with some of the most important of these variations.

Map 3 shows the distribution of the wealth of the state as expressed in terms of per capita effective buying income (after-tax income -- comparable to the "disposable personal income" as defined by the Office of Business Economics).

Only three counties have a higher per capita income than the average for the U. S. The same three counties were in this category in 1958 -- Fulton and DeKalb, the two central counties of the Atlanta Metropolitan Area, and Chattahoochee, which achieves its ranking because most of the county is part of Fort Benning.

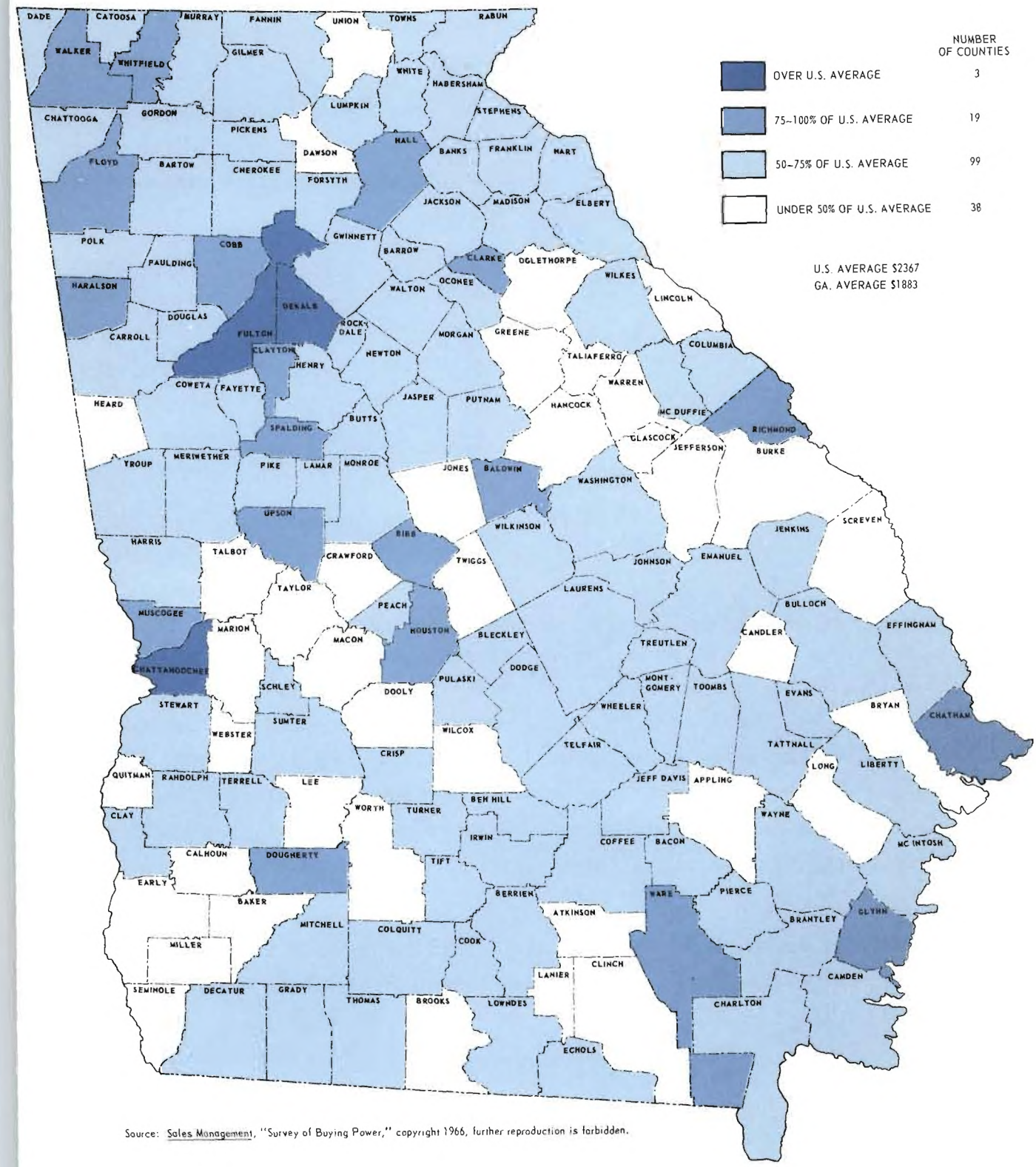
The number of counties with a per capita income between 75% and 100% of that of the U. S. has increased from 13 in 1958 to 19 in 1965. One county, Troup (which suffered a net loss in manufacturing employees), dropped from this group into a lower category. The seven counties added to this group were Baldwin, Hall, Haralson, Houston, Upson, Ware, and Whitfield.

The counties in the next group (50% to 75% of the U. S. per capita) were reduced by five between 1958 and 1965 -- from 104 to 99 -- but this was a net reduction which involved some shifting and exchanging of counties.

There were 38 counties in the last group in 1965, compared with 39 in 1958 (the change included a loss of 19 counties and a gain of 18 since 1958). These counties have a per capita income of less than 50% of the U. S. average.

In comparing this map with others showing the distribution of employment, it should be borne in mind that commuting to jobs across county lines is widespread, and income reported in one county may well have been earned in another.

MAP 3
PER CAPITA EFFECTIVE BUYING INCOME, 1965



Source: Sales Management, "Survey of Buying Power," copyright 1966, further reproduction is forbidden.

MANUFACTURING GAINS AND LOSSES IN GEORGIA BY COUNTY

Manufacturing employment gains throughout the state showed some improvement in the pattern of distribution. Maps 4 and 5 compare the net change in each county between the 1947-1958 and 1958-1965 periods, and it is clear that far more counties have been sharing in the new jobs coming to Georgia in recent years. A summary of the data shows that 135 of the 159 counties in the state gained manufacturing jobs in the 1958-1965 period, compared with only 91 counties between 1947 and 1958.

Net Employment Change	Number of Counties		Distribution of Counties	
	1947-58	1958-65	1947-58	1958-65
Gain over 2,000	6	7	3.8%	4.4%
Gain 1,000 - 2,000	12	13	7.5	8.2
Gain 500 - 1,000	15	24	9.4	15.1
Gain 100 - 500	38	63	23.9	39.6
Gain under 100	20	28	12.6	17.6
Loss	68	24	42.8	15.1
	159	159	100.0%	100.0%

The number of counties in every range of employment gains shows an increase -- the only decrease being in the number of counties which had a net loss in manufacturing. There is, however, considerable change in the particular counties making up each group. In the earlier period, Chatham, Glynn, and Hall counties joined the three Atlanta counties of Fulton, DeKalb, and Cobb in the "over 2,000" group. The same three Atlanta counties are in the top seven for the state in gain between 1958 and 1965, but they are joined by Whitfield, Richmond, Dougherty, and Carroll counties (in descending order of employment gain).

Similarly, of the 12 counties in the second grouping in the 1947-1958 period, five remained in that grouping in the later period, three climbed to the top grouping, and four dropped to lower ranges of gain. All the other groups also show a considerable shifting of counties between the two periods.

Although the employment gains have been much more widely distributed throughout the state in recent years, the overall picture is still one of industrial concentration. Between 1958 and 1965, over 28% of the net increase in

manufacturing employment occurred in Fulton, DeKalb, and Cobb counties. The seven counties in the "Gain over 2,000" group accounted for 44% of the state's net increase. If the next group of counties is added, over 63% of the net manufacturing gain in Georgia for this period is found to be in only 20 counties.

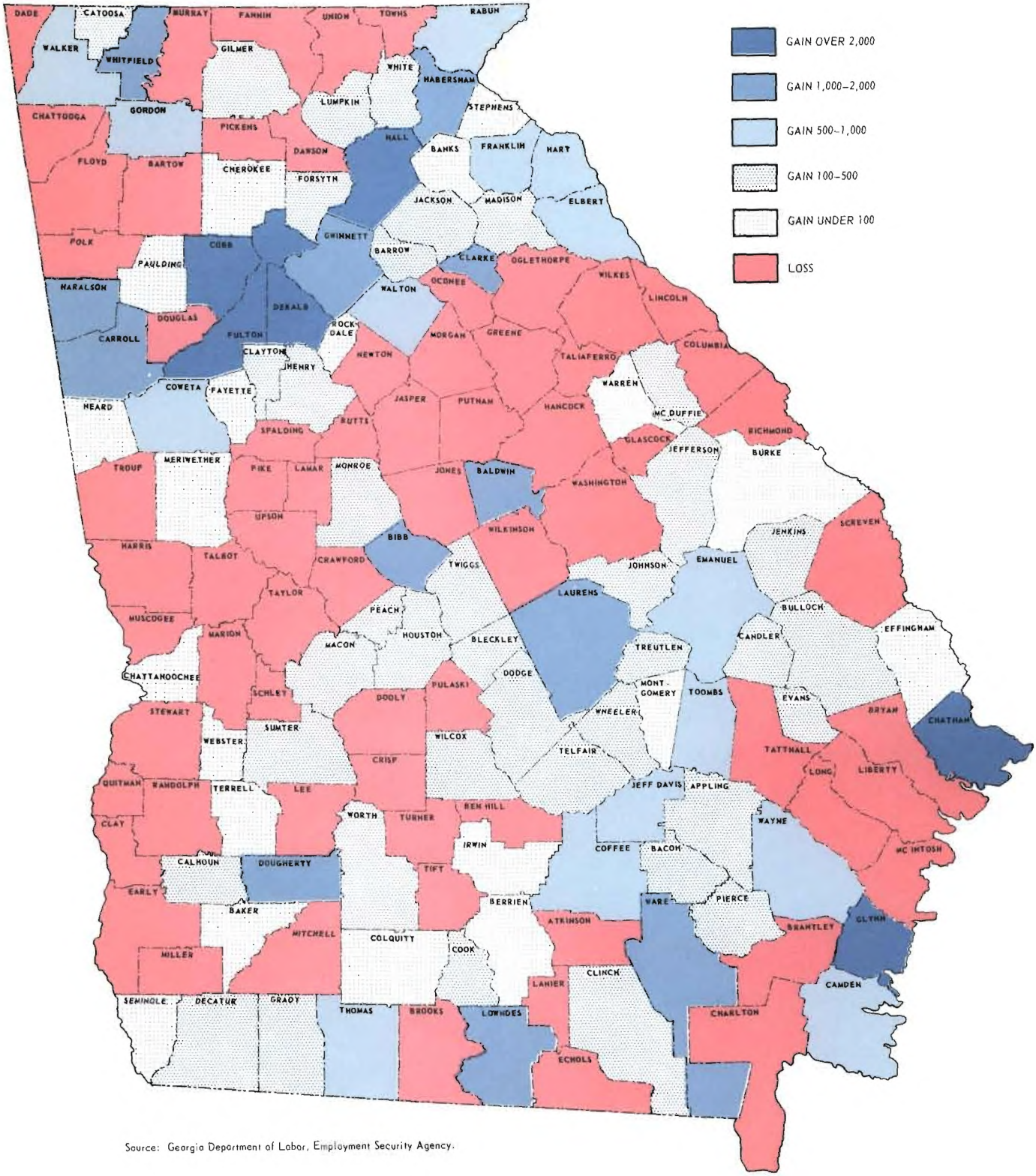
An analysis of the changes in those counties with a net loss in manufacturing workers shows that the decline in lumber and wood industries hit many of them. Textile losses also were an important factor. The state as a whole had a net loss in lumber and wood employment, but achieved an overall gain of over 6,000 employees in textiles between 1958 and 1965. Map 6 shows the pattern of losses and gains in the textile industry. Five counties had losses of over 500 employees each (Troup, Floyd, Coweta, Rockdale, and Spalding) and five had gains of over 500 employees each (Whitfield, Gordon, Dougherty, Bartow, and Tift). By far the most outstanding change was in Whitfield County, where the tremendous growth in tufted textiles increased employment in this one industry by some 4,600 workers.

The greatest increase for the state, however, was in apparel, with a gain of over 21,000 workers between 1958 and 1965. A few counties recorded losses, but, as can be seen from Map 7, the gains were widespread. Apparel plants were recorded in some counties for the first time, and many of the established companies expanded their operations.

The increase in transportation equipment employees ranked second in the state during the period, with nearly 20% of the total manufacturing gain, but in this industry two-thirds of the gain was in the Atlanta area, where over 80% of the employees are concentrated.

MAP 4

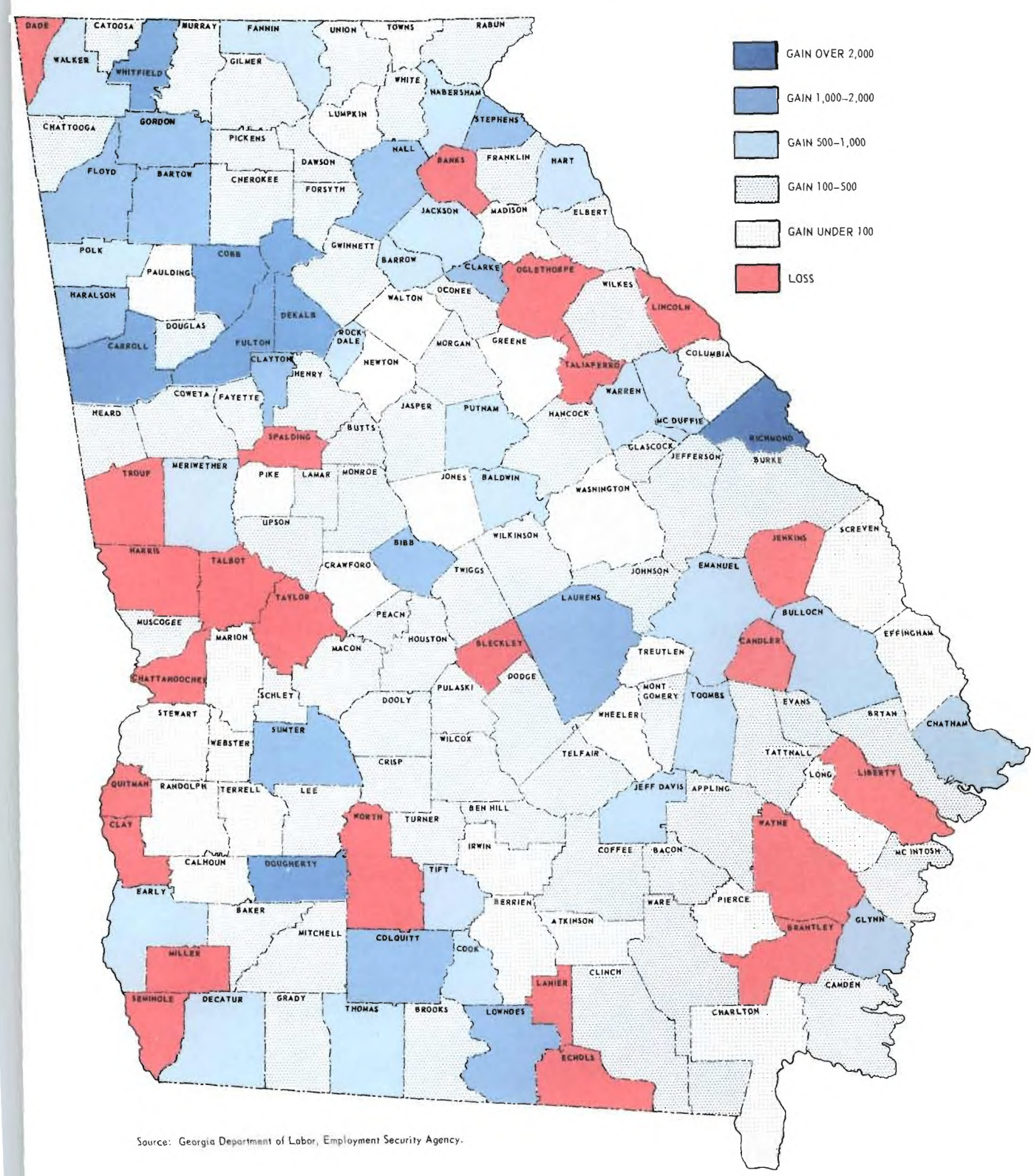
CHANGE IN MANUFACTURING EMPLOYMENT, 1947–1958



Source: Georgia Department of Labor, Employment Security Agency.

MAP 5

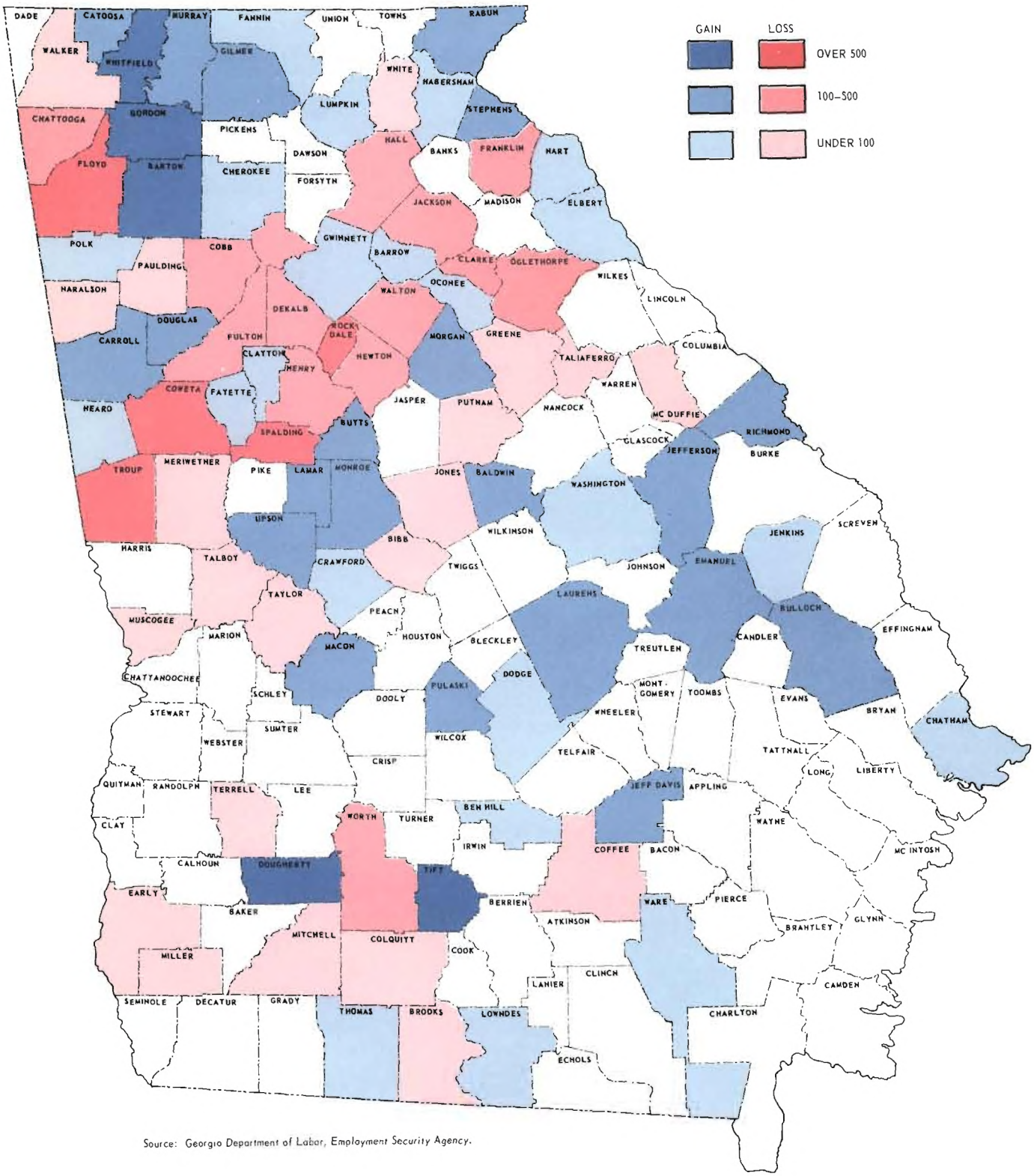
CHANGE IN MANUFACTURING EMPLOYMENT, 1958–1965



Source: Georgia Department of Labor, Employment Security Agency.

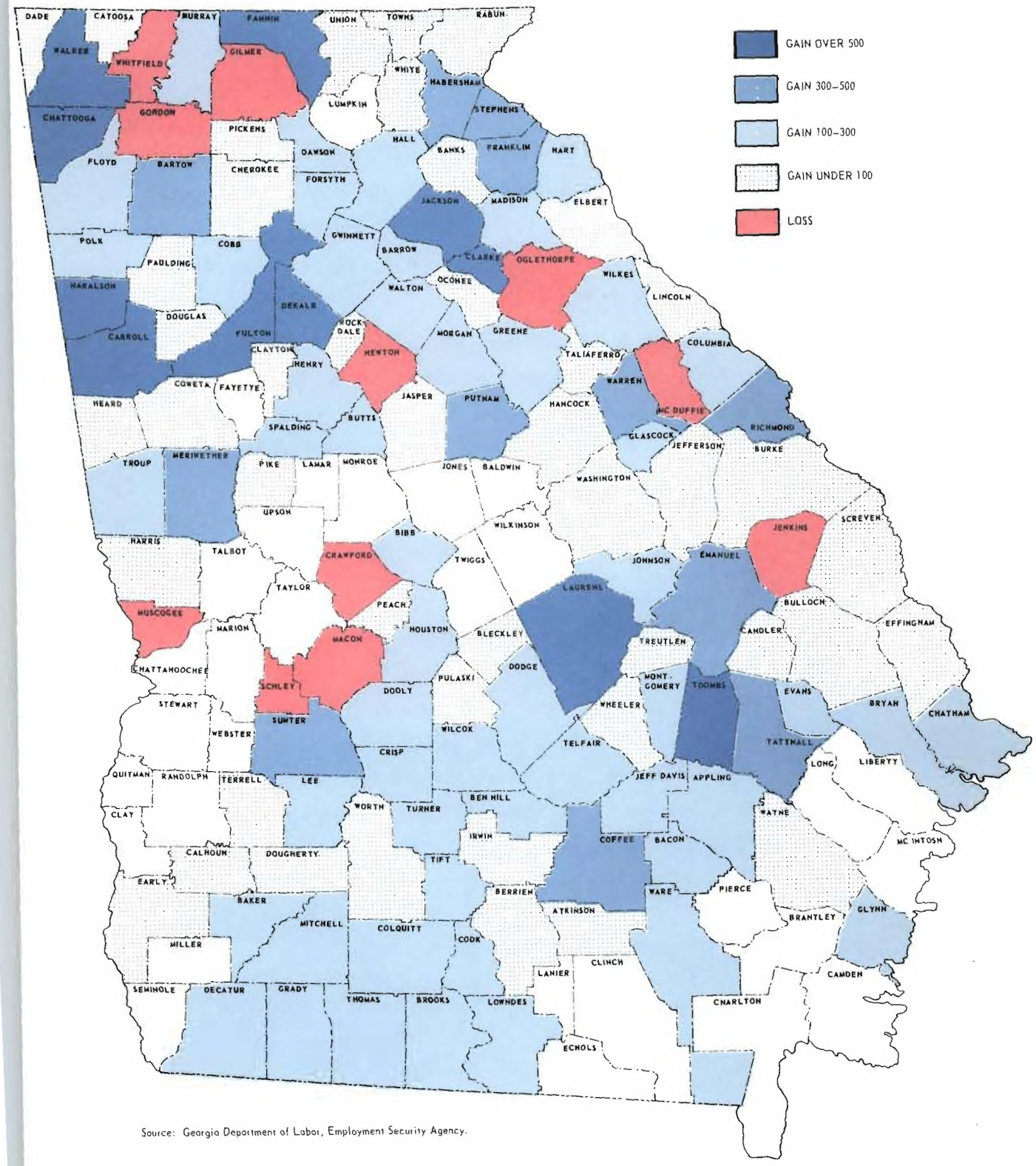
MAP 6

CHANGE IN TEXTILE EMPLOYMENT, 1958–1965



Source: Georgia Department of Labor, Employment Security Agency.

MAP 7
CHANGE IN APPAREL EMPLOYMENT, 1958–1965



Source: Georgia Department of Labor, Employment Security Agency.

DISTRIBUTION OF MANUFACTURING EMPLOYMENT BY COUNTY

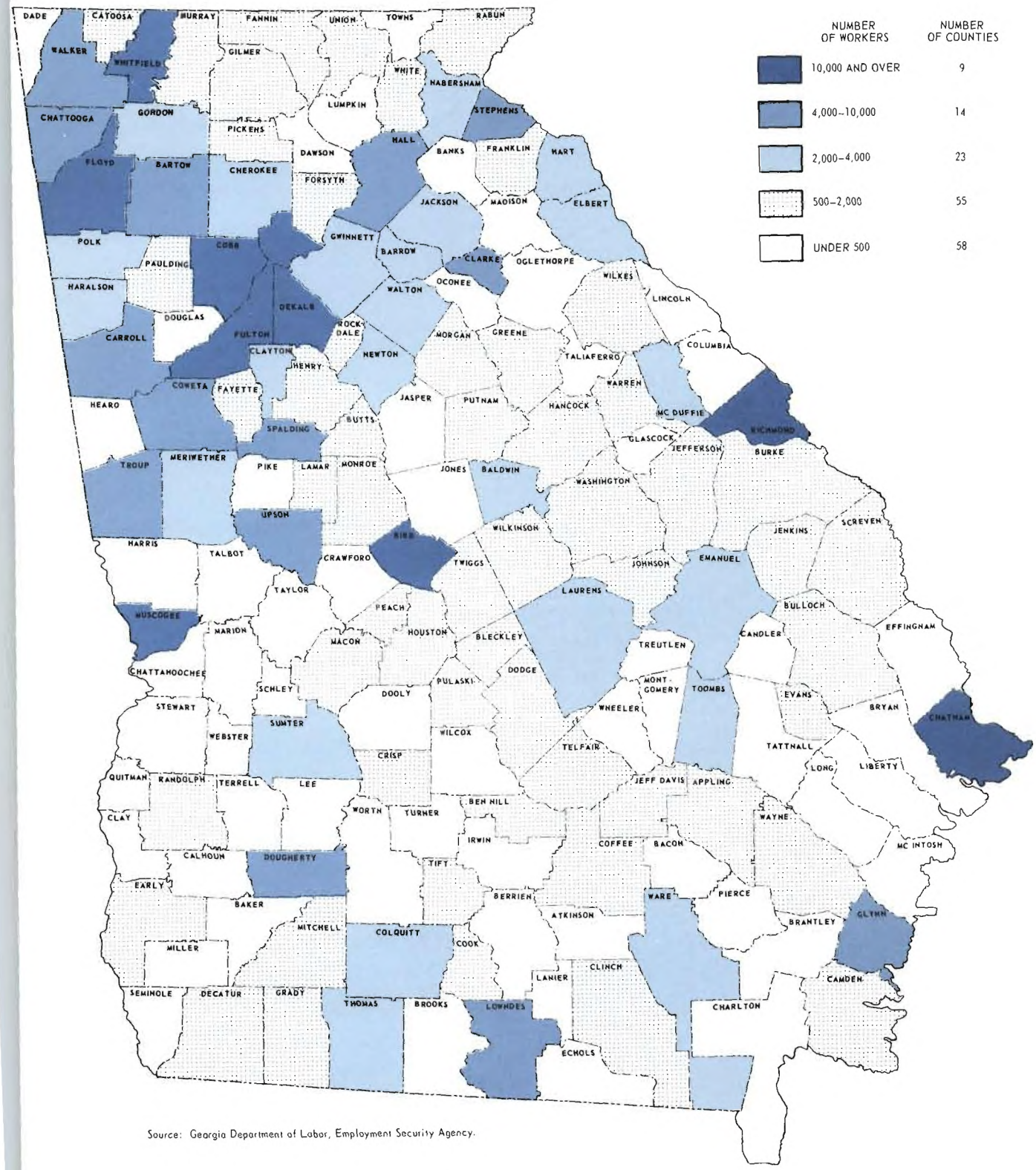
In 1958 six counties in Georgia each had more than 10,000 manufacturing employees. Three were in the Atlanta Metropolitan Area (Fulton, DeKalb, and Cobb counties); the other three were Muscogee County (part of Columbus Metropolitan Area), Bibb County (part of Macon Metropolitan Area), and Chatham County (Savannah Metropolitan Area). By 1965 a fifth metropolitan area had joined this group -- Richmond County (part of Augusta Metropolitan Area) -- and two other counties not defined as being part of any Standard Metropolitan Statistical Area had passed the 10,000 mark -- Whitfield and Floyd counties, both in northwest Georgia. (See Map 8.)

Four new counties passed the 4,000 employees level (Dougherty, Stephens, Lowndes, and Bartow), bringing the number in the 4,000 to 9,999 group to 14. When the "10,000 and over" group is added to these counties, it is seen that a total of 23 counties had over 4,000 employees each in 1965 (compared with 19 in 1958); these 23 counties represent two-thirds of the total manufacturing employment in Georgia. Just under 26% of all manufacturing workers are in only three counties -- Fulton, DeKalb, and Cobb -- all three within the Atlanta Metropolitan Area.

At the other end of the scale are 58 counties each with less than 500 manufacturing employees. (This compares with 75 counties in 1958.) These are chiefly rural counties, and many of them have been losing jobs in the lumber and wood products industry. The increase in apparel manufacturing has been of great help in many of these areas, but 19 of the 58 counties had a net loss in manufacturing employment between 1958 and 1965, and 11 of them recorded an average of less than 100 manufacturing jobs in 1965.

MAP 8

DISTRIBUTION OF MANUFACTURING EMPLOYMENT, 1965



Source: Georgia Department of Labor, Employment Security Agency.

DISTRIBUTION OF MANUFACTURING EMPLOYMENT IN GEORGIA BY INDUSTRY

In 1958 nearly two-thirds of Georgia's manufacturing workers were employed in four industries -- textiles, food, apparel, and lumber and wood products. Unfortunately for Georgia, these industries are at the lower end of the wage scale. By 1965 the proportion of workers in this group had decreased to just under 60%. This improvement was modified, however, by the increase in apparel manufacturing -- an industry that, in Georgia, competes with lumber and wood processing for bottom place in average production wages. These two industries represented 22.3% of manufacturing employment in 1958 and showed a slight increase to 22.5% by 1965.

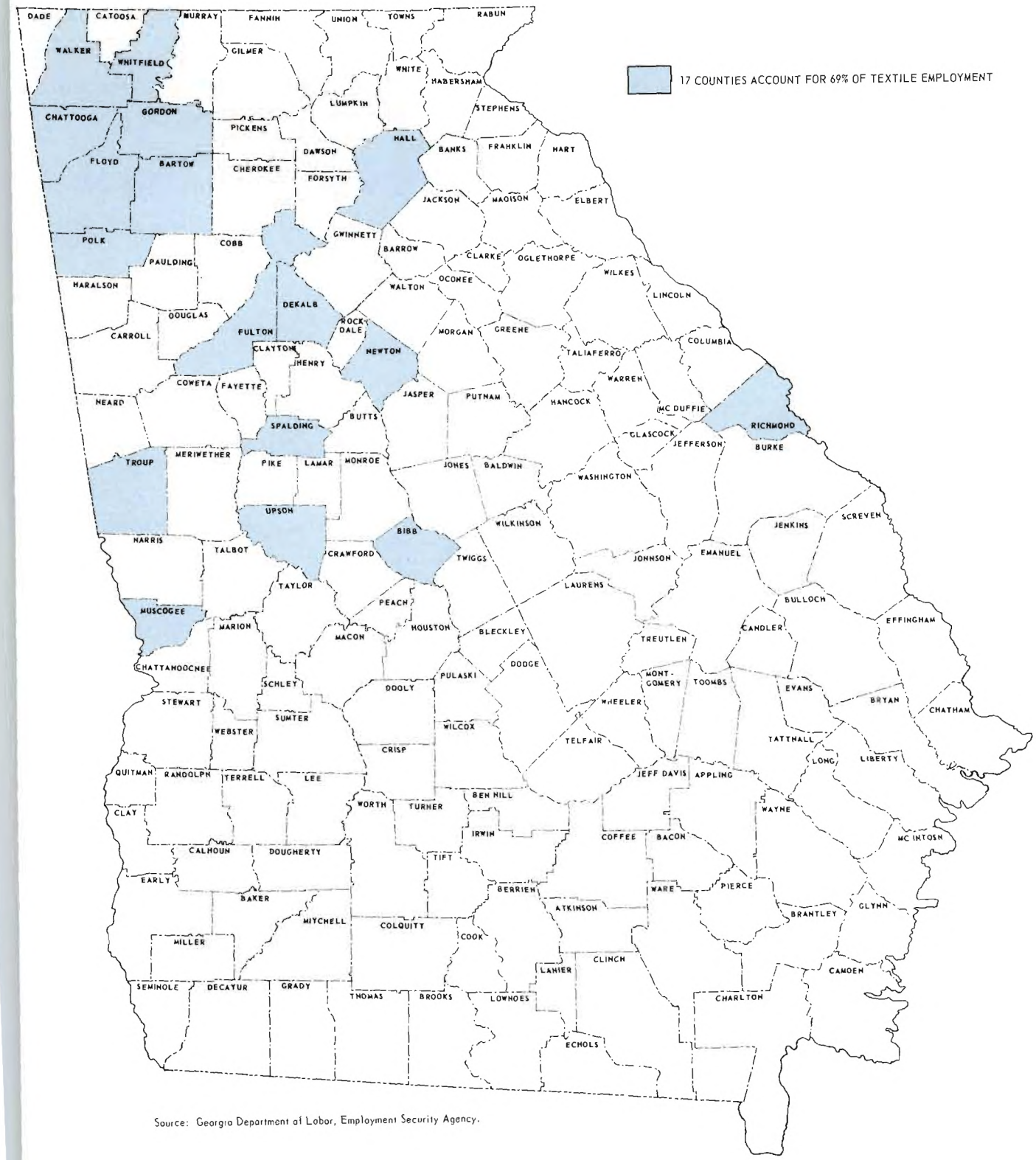
Most of the textile mills are concentrated in the northern half of the state (Map 9), with 17 counties accounting for 69% of the industry's employment. In 1958, 16 counties represented a similar percentage of textile workers. In both years, each of these counties had more than 2,000 textile employees, the change of one county being made up from the 1965 inclusion of Bartow and Gordon counties and the omission of Coweta County, which dropped below the 2,000 level between 1958 and 1965.

Employment in apparel manufacturing increased by over 21,000 workers between 1958 and 1965. Most of the counties which had major concentrations of apparel employment in 1958 increased their number of workers, but many of the new plants settled in the rural areas. By 1965, apparel plants were located in 125 of the 159 counties of the state. One indication of the greater dispersion is the fact that whereas in 1958, 70% of the state's apparel jobs were in only 28 counties, this same percentage of workers in 1965 needed a combination of 38 counties. (See Map 10.)

Map 11 shows the major concentrations of food processing. Although there are very few counties without some small food-handling operation, 67% of the total employment in this industry is in 11 counties. This compares with a similar percentage located in only 10 counties in 1958, with Dougherty being the county added on the 1965 map.

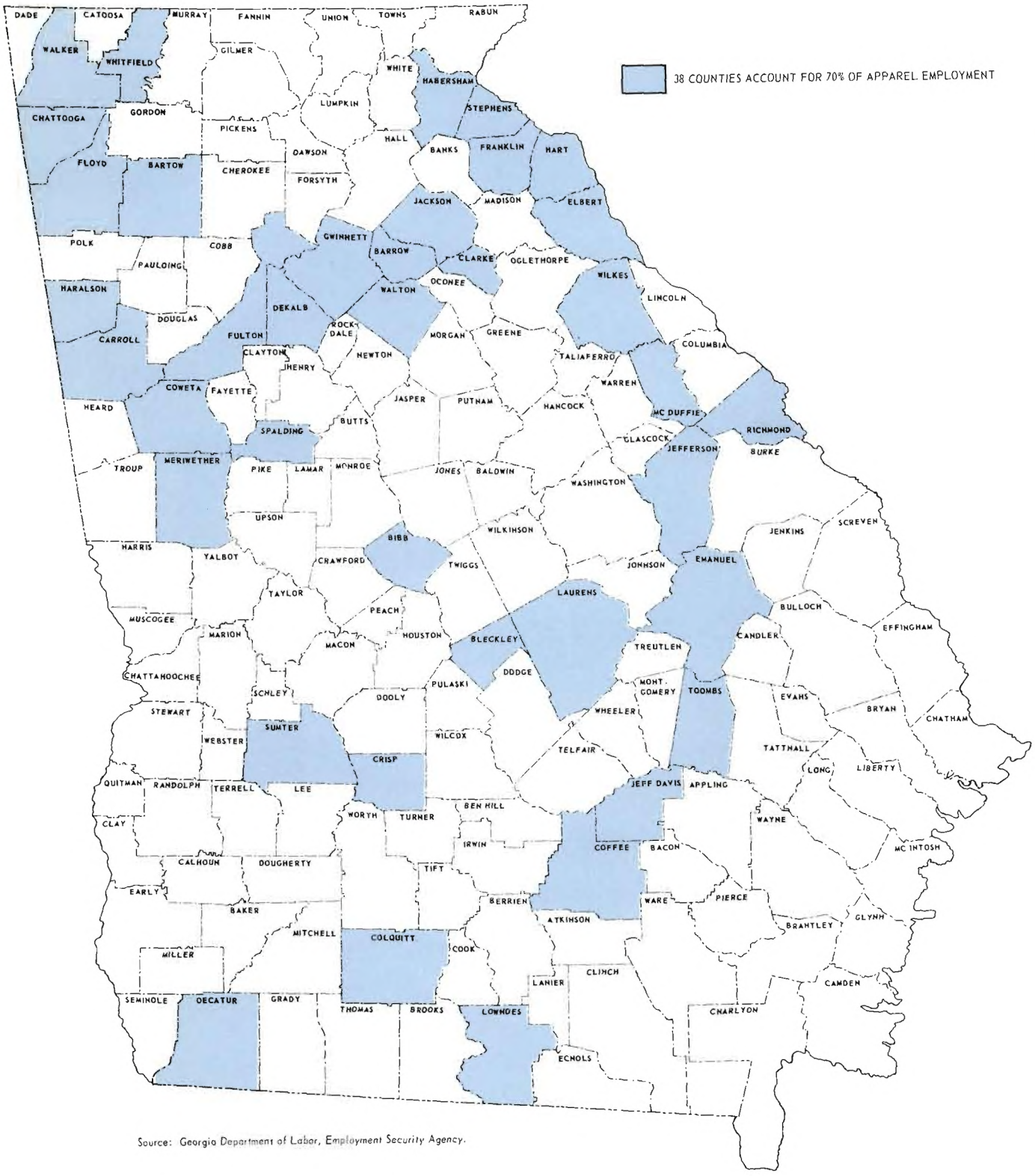
Lumber and wood manufacturing (Map 12) is widespread throughout the state, but the loss of jobs between 1958 and 1965 has caused a somewhat greater concentration of the remaining workers. In 1958 the 31 leading counties accounted

MAP 9
TEXTILE EMPLOYMENT, 1965



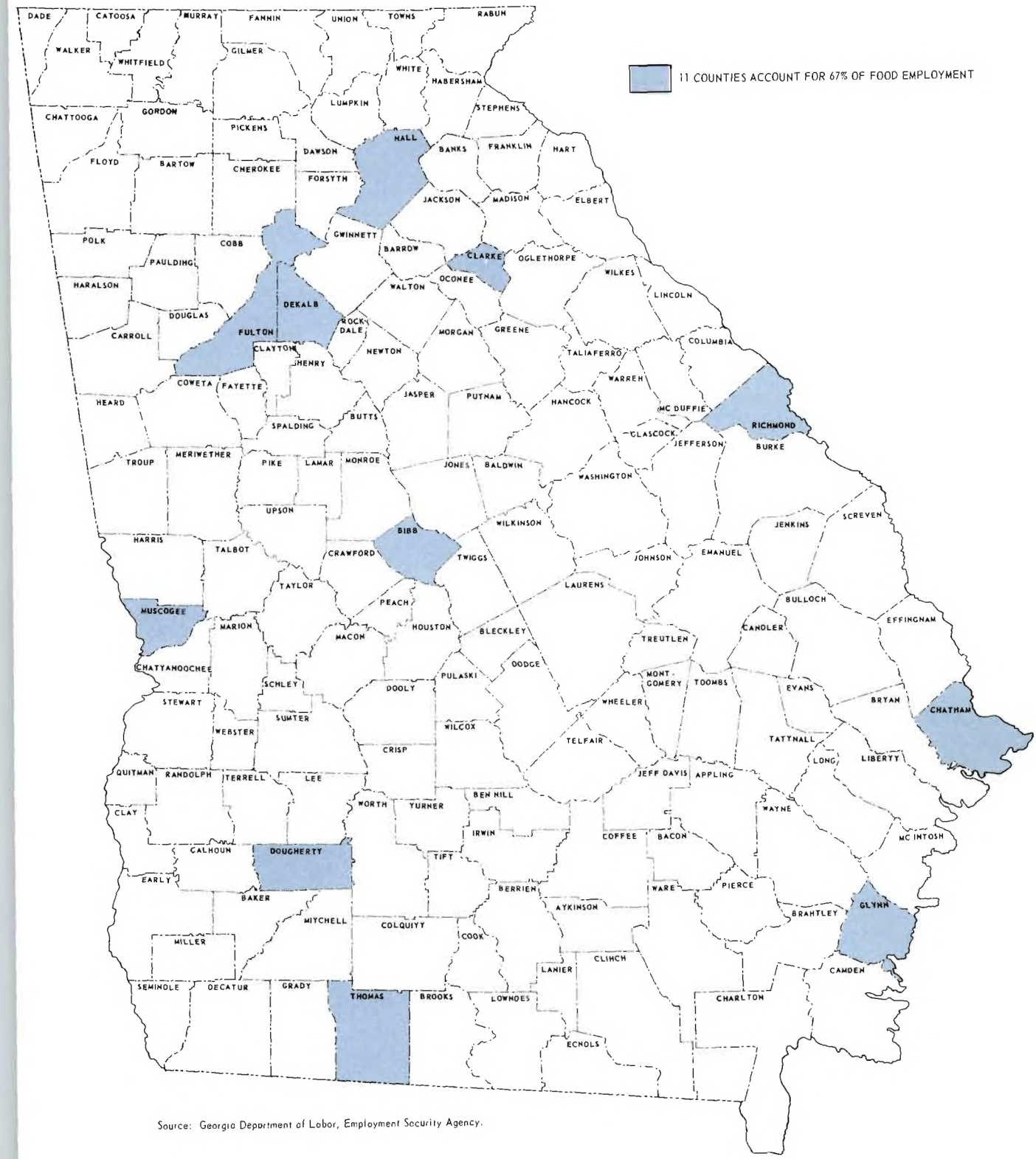
Source: Georgia Department of Labor, Employment Security Agency.

MAP 10
APPAREL EMPLOYMENT, 1965



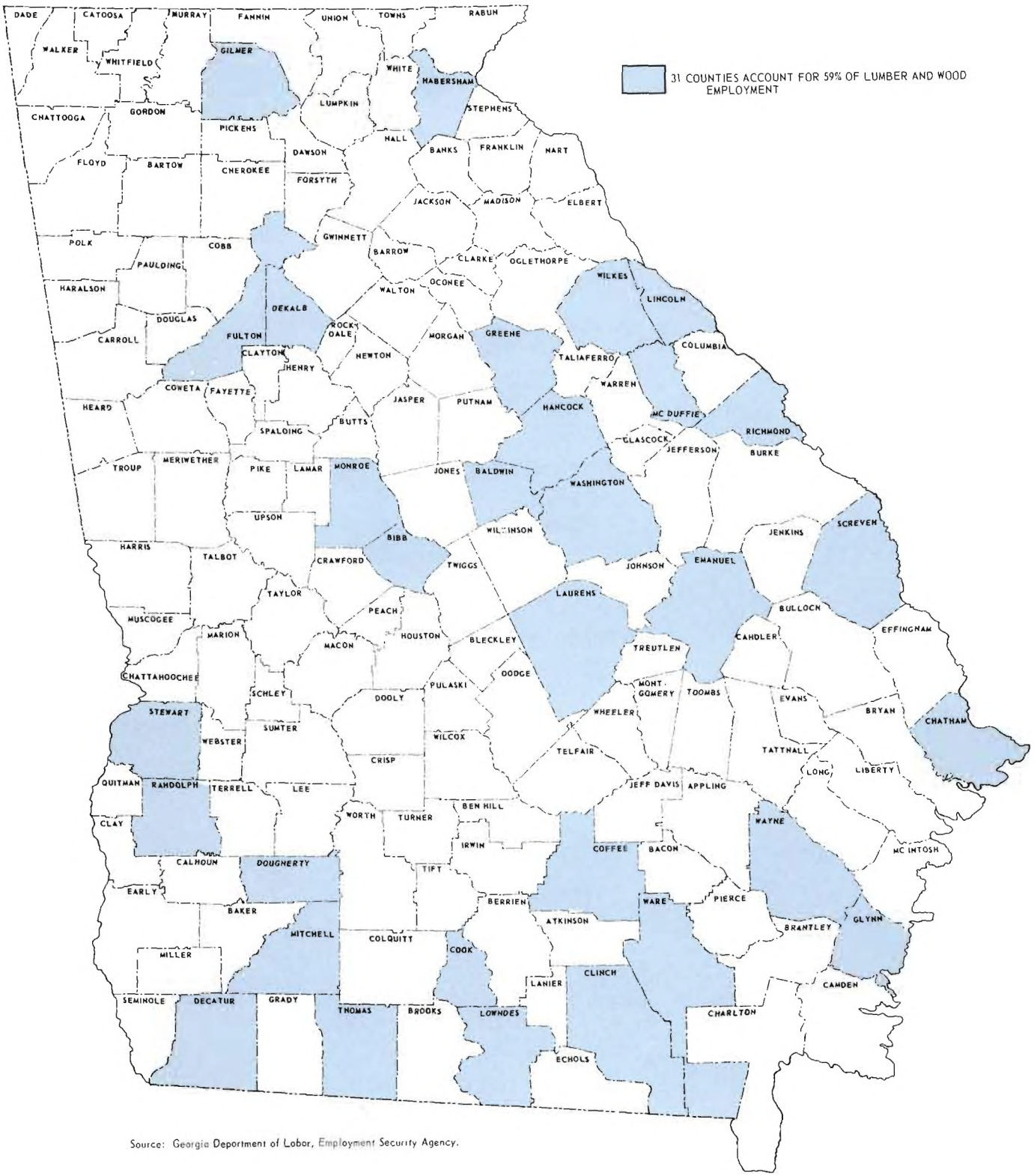
Source: Georgia Department of Labor, Employment Security Agency.

MAP 11
FOOD EMPLOYMENT, 1965



Source: Georgia Department of Labor, Employment Security Agency.

MAP 12
LUMBER AND WOOD EMPLOYMENT, 1965



Source: Georgia Department of Labor, Employment Security Agency.

for 54% of the employment in this industry, but by 1965 the same number of counties covered 59% of the workers.

Transportation equipment, which moved up to fourth place in 1965 (see Chart 8), continues to be a highly concentrated industry. Although a number of small companies have started operations throughout the state, Fulton, DeKalb, and Cobb counties dominate the industry with 81% of the total employment. A further 10% of the workers are located in Chatham, Sumter, Peach, and Hart counties.

The only other industry employing over 5% of Georgia's total manufacturing workers is paper and allied products, which also is heavily concentrated in a few locations. In 1965, one-half this industry's employees were in Fulton, DeKalb, and Chatham counties. Another seven counties (Bibb, Camden, Richmond, Floyd, Glynn, Lowndes, and Wayne, in descending order of employment magnitude) accounted for over 38% of the workers -- a total of 88% of the workers in 10 counties of the state.

LOW-WAGE INDUSTRIES IN GEORGIA

Emphasis has been placed in this report on the high proportion of low-wage industries in Georgia. Map 13 pulls together the concentration of three such industries by county:

	Percent of Georgia Manufacturing Employment	Average Weekly Earnings 1965
Textiles	25.7	$77.65
Apparel	15.8	57.38
Lumber and wood	6.7	57.09
	48.2	

The percentage of manufacturing employment in each of these industries in Georgia is considerably higher than the U. S. average. (See Chart 9.) Distribution throughout the state is uneven, and 76 of the 159 counties have over three-quarters of their manufacturing employment in these three industries. In 36 other counties the proportion is between 50% and 75%.

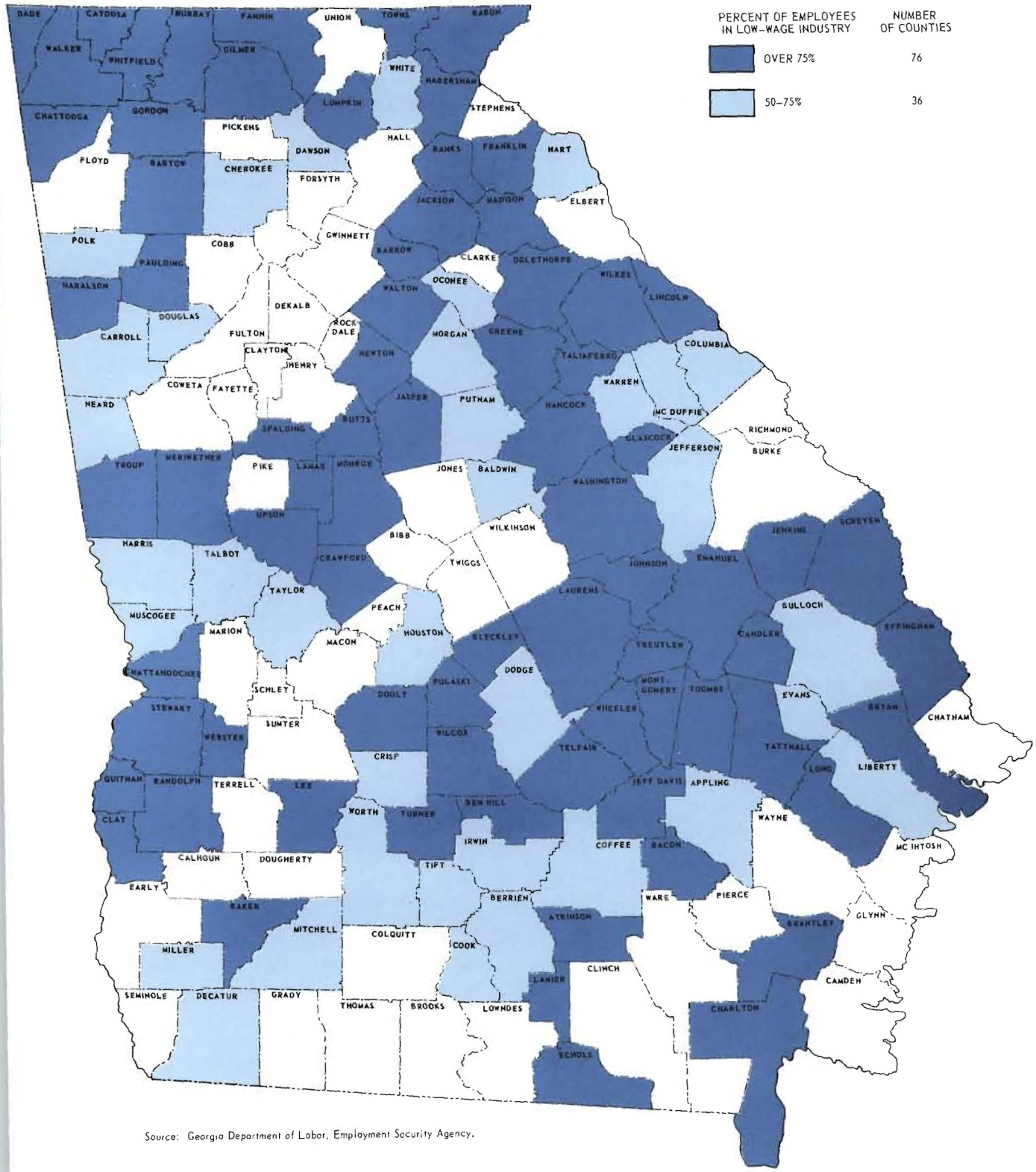
Although from an income standpoint the predominance of low-wage industries in these counties is regrettable, it should not be overlooked that low-wage jobs are better than no jobs at all. Farm work in most of these counties has been declining steadily, and since many of the displaced workers have little or no training for factory operations, the unskilled and semiskilled jobs available to them in these three industries are very welcome.

Throughout the nation there is a growing problem of matching jobs to abilities. The demand for highly skilled workers continues to expand but, for the most part, cannot be filled from the ranks of the unemployed, many of whom have only limited skills.

The low-wage industries are one answer to the job needs of former farm workers and other workers (both urban and rural) whose jobs have disappeared in the technological changes taking place. The training or retraining of these workers to give them new skills is, of course, another answer, and this is being tackled by the vocational schools and other programs. There is a continuing need for educational facilities where adults as well as school children can have the opportunity to achieve learning and skills commensurate with their

MAP 13

LOW-WAGE INDUSTRIES: EMPLOYMENT IN TEXTILES, APPAREL AND LUMBER AND WOOD AS PERCENT OF TOTAL MANUFACTURING, 1965



Source: Georgia Department of Labor, Employment Security Agency.

abilities. Since, however, there are great variations in learning ability, there will always be a demand for unskilled or semiskilled jobs.

Georgia's need is to balance these low-wage jobs with a better proportion of high-wage, high-skill jobs. Continued emphasis on educational facilities to provide qualified personnel must be matched by the attraction of top-ranking industries in order to retain such personnel within the state.

Appendix

MANUFACTURING EMPLOYMENT IN SEVEN SOUTHEASTERN STATES AND THE UNITED STATES, 1958-1965

Appendix Table 2

MANUFACTURING EMPLOYMENT IN SELECTED STATES, 1958-1965

Alabama

SIC		Employees (000) 1958	Employees (000) 1965	Change 1958-65	Percent Change 1958-65	Percent Distribution 1958	Percent Distribution 1965	Change 1958-65
	Total	233.3	275.8	42.5	18.2	100.0	100.0	100.0
20	Food	21.2	24.9	3.7	17.5	9.1	9.0	8.7
22	Textiles	40.9	37.8	- 3.1	- 7.6	17.5	13.7	- 7.3
23	Apparel	21.5	36.5	15.0	69.8	9.2	13.2	35.3
24	Lumber and wood	25.5	23.5	- 2.0	- 7.8	10.9	8.5	- 4.7
26	Paper	10.4	14.0	3.6	34.6	4.5	5.1	8.5
27	Printing, publishing	5.3	6.3	1.0	18.9	2.3	2.3	2.4
28	Chemicals	8.4	10.8	2.4	28.6	3.6	3.9	5.6
30	Rubber, miscellaneous plastics	5.9	6.7	.8	13.6	2.5	2.4	1.9
32	Stone, clay, glass	8.3	8.4	.1	1.2	3.6	3.0	.2
33	Primary metals	43.3	46.3	3.0	6.9	18.6	16.8	7.1
34	Fabricated metals	11.9	14.0	2.1	17.6	5.1	5.1	4.9
35 & 36	Machinery, electrical equipment	8.6	13.4	4.8	55.8	3.7	4.9	11.3
37	Transportation equipment	15.2	17.6	2.4	15.8	6.5	6.4	5.6
	All other	6.9	15.6	8.7	126.1	3.0	5.7	20.5

Source: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings Statistics for States and Areas, 1939-1965.

Appendix Table 4

MANUFACTURING EMPLOYMENT IN SELECTED STATES, 1958-1965

Mississippi

SIC		Employees (000) 1958	1965	Change 1958-65	Percent Change 1958-65	Percent Distribution 1958	1965	Change 1958-65
	Total	113.0	151.6	38.6	34.2	100.0	100.0	100.0
20	Food	14.9	16.9	2.0	13.4	13.2	11.1	5.2
22	Textiles	4.4	5.4	1.0	22.7	3.9	3.6	2.6
23	Apparel	24.3	34.2	9.9	40.7	21.5	22.6	25.7
24	Lumber and wood	21.2	23.1	1.9	9.0	18.8	15.2	4.9
25	Furniture	5.2	9.4	4.2	80.8	4.6	6.2	10.9
26	Paper	8.4	5.3	- 3.1	-36.9	7.4	3.5	- 8.0
27	Printing, publishing	2.4	2.6	.2	8.3	2.1	1.7	.5
28	Chemicals	3.7	4.9	1.2	32.4	3.3	3.2	3.1
32	Stone, clay, glass	4.1	5.4	1.3	31.7	3.6	3.6	3.4
33 & 34	Primary and fabricated metals	2.9	7.8	4.9	169.0	2.6	5.1	12.7
35	Machinery	2.4	6.4	4.0	166.7	2.1	4.2	10.4
36	Electrical equipment	3.9	9.1	5.2	133.3	3.5	6.0	13.5
37	Transportation equipment	11.0	10.6	- .4	- 3.6	9.7	7.0	- 1.0
	All other	4.2	10.5	6.3	150.0	3.7	6.9	16.3

Source: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings Statistics for States and Areas, 1939-1965.

Appendix Table 6

MANUFACTURING EMPLOYMENT IN SELECTED STATES, 1958-1965

South Carolina

SIC		Employees (000) 1958	Employees (000) 1965	Employees (000) Change 1958-65	Percent Change 1958-65	Percent Distribution 1958	Percent Distribution 1965	Percent Distribution Change 1958-65
	Total	227.4	293.1	65.7	28.9	100.0	100.0	100.0
20	Food	11.1	12.1	1.0	9.0	4.9	4.1	1.5
22	Textiles	129.3	139.9	10.6	8.2	56.9	47.7	16.1
23	Apparel	25.2	41.2	16.0	63.5	11.1	14.1	24.4
24	Lumber and wood	17.9	15.6	- 2.3	-12.9	7.9	5.3	- 3.5
25	Furniture	3.5	4.1	.6	17.1	1.5	1.4	.9
26	Paper	7.0	9.8	- 2.2	40.0	3.1	3.3	- 3.3
27	Printing, publishing	3.3	3.8	.5	15.2	1.5	1.3	.8
28	Chemicals	12.7	18.2	5.5	43.3	5.6	6.2	8.4
32	Stone, clay, glass	5.2	9.1	3.9	75.0	2.3	3.1	5.9
35	Machinery	3.2	11.6	8.4	262.5	1.4	4.0	12.8
	All other	9.0	27.7	18.7	207.8	4.0	9.5	28.5

Source: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings Statistics for States and Areas, 1939-1965.

Appendix Table 8

MANUFACTURING EMPLOYMENT IN THE UNITED STATES, 1958-1965

SIC		Employees (000)			Percent Change	Percent Distribution		
		1958	1965	Change 1958-65	1958-65	1958	1965	Change 1958-65
	Total	15,946.0	17,983.0	2,037.0	12.8	100.0	100.0	100.0
19	Ordnance	158.1	236.1	78.0	49.3	1.0	1.3	3.8
20	Food	1,772.8	1,737.2	-35.6	- 2.0	11.1	9.7	- 1.7
21	Tobacco	94.5	83.7	-10.8	-11.4	.6	.5	- .5
22	Textiles	918.8	919.5	.7	.1	5.8	5.1	-
23	Apparel	1,171.8	1,351.2	179.4	15.4	7.3	7.5	8.8
24	Lumber and wood	615.0	606.1	- 8.9	- 1.4	3.9	3.4	- .4
25	Furniture	360.8	429.1	68.3	18.9	2.3	2.4	3.4
26	Paper	564.1	637.5	73.4	13.0	3.5	3.5	3.6
27	Printing, publishing	872.6	977.3	104.7	12.0	5.5	5.4	5.1
28	Chemicals	794.1	902.3	108.2	13.6	5.0	5.0	5.3
29	Petroleum	223.8	178.0	-45.8	-20.5	1.4	1.0	- 2.2
30	Rubber, miscellaneous plastics	344.3	463.7	119.4	34.7	2.2	2.6	5.9
31	Leather	359.2	353.8	- 5.4	- 1.5	2.3	2.0	- .3
32	Stone, clay, glass	562.4	620.9	58.5	10.4	3.5	3.5	2.9
33	Primary metals	1,153.5	1,291.7	138.2	12.0	7.2	7.2	6.8
34	Fabricated metals	1,076.9	1,260.5	183.6	17.0	6.8	7.0	9.0
35	Machinery	1,362.4	1,713.9	351.5	25.8	8.5	9.5	17.3
36	Electrical equipment	1,249.0	1,672.3	423.3	33.9	7.8	9.3	20.8
37	Transportation equipment	1,594.6	1,739.7	145.1	9.1	10.0	9.7	7.1
38	Instruments	323.8	385.0	61.2	18.9	2.0	2.1	3.0
39	Miscellaneous	373.0	424.1	51.1	13.7	2.3	2.4	2.5

Source: U. S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings Statistics for the United States.